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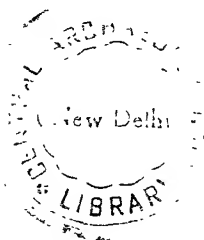
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P. Jolyphot JULLIEN, Geneva

EDOUARD NAVILLE.

ÉDOUARD NAVILLE

In Professor Édouard Naville the Egypt Exploration Society has lost its first excavator. So long ago as April 1882, not long after the foundation of the Society, he accepted his first call to excavate for it. "I cannot conceive," he writes to the Secretary, "anything more interesting for an egyptologist than to make excavations, and I feel most honoured that the Society should have asked me to be one of its agents." He went to Egypt at the close of 1882 and began work for us at Tell el-Maskhûṭah in January 1883. Pithom and Ramses were dug also during the winter of 1883, and in 1884 followed the investigation of the Route of the Exodus. The results were published in 1885 in a thin volume, *The Store-City of Pithom and the Route of the Exodus*, which was the firstfruits of the Society's work. In his preface Naville says: "in publishing...the results of the first expedition, I hasten to seize the opportunity of paying a just tribute of gratitude to those founders and promoters of the EGYPT EXPLORATION FUND to whom I am indebted for my initiatory experience as an explorer in the Eastern Delta of the Nile. The first name which presents itself to my pen—the name of SIR ERASMUS WILSON, the enlightened patron of Egyptology in England, and first President of the EGYPT EXPLORATION FUND—recalls the heavy bereavement which the Society has recently sustained in the loss of that eminent man, whose commanding intellect ranged over the widest domains of knowledge, and whose nobleness of character and inexhaustible liberality have graven an ineffaceable record upon the age in which he lived." Naville, it may be observed, *par parenthèse*, was rather fond of Johnsonian periods in writing English: it was the influence of French classicism, no doubt. He goes on to say: "I also tender my acknowledgements to the members of the Committee, and especially to the two honorary Secretaries, Miss Amelia B. Edwards and Mr. Reginald Stuart Poole, to whose indefatigable zeal the foundation and popularization of the Society are due, and to both of whom I am much indebted for their constant support..." He further thanks others, as M. Maspero, then Director-General of the Museums of Egypt, for their help.

The format of the book was that retained by the Society until the publication of its thirty-seventh memoir, *Balabish*, in 1920. The next volume, *The City of Akhenaten*, I, was presented with a new form of page, although the size remained uniform with the preceding volumes. Some of us may have regretted the abolition of the old-fashioned double column which had been characteristic of the Fund's memoirs for so many years, but really only for sentimental reasons, as the new page is much clearer and more easy to read.

In the same year (1885) appeared the second memoir, Petrie's *Tanis*, I. For in 1884 Sir Flinders Petrie had joined the Fund, and was digging for it at San el-Hagar. For many years Naville and he continued to be the protagonists of the Fund, their work representing two different schools of archaeologists: Naville the older-fashioned *déblayeur* of great temples and bringer back of great monuments, Petrie the carer for small things and originator of methodical recording of everything found: for might not the trifle unconsidered to-day be regarded as a crucial object by some future generation of the learned? Naville, however, cared little for "les menus objets."

He pursued with ardour his investigation of the sites in the Eastern Delta which he considered to be connected with the Exodus. In 1885-6 he explored the Wâdî Ṭumilât

or land of Goshen, published in 1887 as *Goshen and the Shrine of Saft el-Henneh*, and in 1886-9 he excavated Bubastis, published in three important memoirs, *Bubastis I* and *II* and *The Festival-Hall of Osorkon II*. From Bubastis he brought back some important as well as big trophies to the British Museum, including the Twelfth Dynasty colossus and head which are now generally attributed to Amenemhet III, though then the head was usually considered to be that of a Hyksos. Unfortunately, owing to the earliest actual royal name upon it being that of Osorkon II, and in the absence of any definite conclusion as to its real date, it had then to be mounted among the monuments of the Twenty-second Dynasty, where it is still, many centuries away from its own time. Perhaps later on it may be found possible to move it to its proper position, in spite of its enormous weight. Whole pillars too, and great Hathor-capitals, came to Cairo and to England and America. Naville was fond, when he came to London, of pointing out the big things he had brought back for our national collection; and there are some very fine things among them. His Bubastite Hathor-capital in the Museum it is hoped at no distant date to raise on a high pedestal, in order to give some idea of its real appearance, as has been done with a similar capital at Berlin, and as Naville always hoped he might see it.

Naville now decided to leave the Delta and examine at Aḥnas (Aḥnasīyat el-Medinah) the site of the ancient Ḥnes (Herakleopolis). There he worked in 1890-1. Next year he returned to the Delta for work at Tmai el-Amdid (Mendes) and Tell Mukdam. From Aḥnas too came big columns, probably in reality of very early date, though with the names of Ramesses II on them, and from Tell Mukdam fragments of Twelfth Dynasty royal statues.

Naville probably considered his greatest work to be the discovery of Pithom and his reconstruction of the route of the Exodus; but posterity will certainly prefer to extol the excavations of Dêr el-baḥrî. The Temple of Hatshepsut was of course well known already. Mariette had dug there, Maspero also; Dümichen had partly copied its inscriptions. The general lay-out of the place with its terraces and friezes was always easily recognizable beneath the stone rubbish and the tumble-down walls and tower of the Coptic monastery of St. Phoibammon. Naville through the Egypt Exploration Fund (or the Egypt Exploration Fund through Naville) cleared the site in the years 1893-6. He had for two seasons the help of Mr. D. G. Hogarth: the plans were supervised by the late Mr. Somers Clarke, who alone superintended the later works of preservation of the terrace-sculptures and upper halls that were necessary, and the facsimile drawing of the reliefs was admirably carried out by Mr. Howard Carter. The results, published in a larger format than usual, formed a splendid series of volumes with Carter's wonderful drawings of sculptures, the finest of all the Fund's publications in appearance, and a worthy commemoration of a great piece of work well carried out. A tablet on the restored wall of the ramp commemorates the excavation of the Temple of Queen Hatshepsut by the Egypt Exploration Society. And, as Naville liked to say, the Temple of Dêr el-baḥrî, the most picturesque in Egypt, and placed just at the spot where tourists most do congregate, opposite Luxor, is the finest advertisement the Fund ever had. And this is true. For although academic and scientific circles may appreciate the work of the newer school of anthropological archaeologists at its true value, the layman cannot. The clearance and preservation of a great building, however, are something that he can easily understand.

Circumstances prevented Naville's return to excavation till November, 1903, when with the present writer as his assistant he set out to investigate the mounds south of the temple of Hatshepsut, where there were indications of an Eleventh Dynasty necropolis. We found tombs, but much more as well: namely the funerary temple of king Neb-ḥapet-Rê Mentuhetep III which now stands, entirely cleared, south of Hatshepsut's temple, with its

platform approached by a ramp between two colonnades, the plan which Hatshepsut's architect obviously imitated in duplicate in her temple. Naville was never until the last year able to spend the whole winter on this work: just as I carried on after he left in December 1903, so during the ensuing winters till 1905-6 I ran the work until he came out (usually in January) and then went home, so that he and I played *Cox and Box* in the direction of the excavations, rarely overlapping for more than a week, sometimes not at all. Ayrton in 1904-5, Currelly after that till the end, Dalison and Dennis, also assisted him. In 1906-7 I came out as a visitor and stayed with Ayrton in the Tombs of the Kings, going over the hill to Dêr el-bahri every day, Currelly being Naville's official chief co-adjutor. The premature closing down of the work before the whole of its surroundings had been cleared up was a great disappointment to Currelly and myself, but circumstances at the moment were adverse to a continuation, and Naville thought there would be little more to find. No more big things, either in buildings or statues, perhaps; but that there was more of interest yet to be found the later diggings of the Metropolitan Museum of New York have proved.

For a year or two Naville did not dig, but in 1909 he went to Abydos to see if he could glean, with Ayrton's help, something more from Umm el-Ḳa'âb, an attempt carried on next year with the assistance of Legge and myself, with Peet and Dixon in charge of the necropolis-excavations. Practically nothing turned up at the royal tombs. The digging of the necropolis was not Naville's type of work, and he was not much interested in it except when he thought it proved that the "predynastic" Egyptians were not predynastic, a heresy in which he occasionally indulged, but without, it always seemed to me, much conviction. What he really was interested in at Abydos was the Osireion, the entrance to which had been discovered by Professor Petrie and Miss Murray in 1902, but had been left since then owing to the obviously large amount of money that would be needed to effect its clearance of sand. The *Book of the Dead* was one of Naville's earliest Egyptological loves, and he was always attracted by a religious or funerary text, preferably of the New Kingdom. So that the inscriptions of Meneptah on the sides of the descending staircase were an irresistible magnet to him. His wish was carried out: he dug the Osireion for the Fund, and found that it was an immense subterranean hall, built of large granite and quartzite blocks, and closely resembling the Temple of the Sphinx at Gîzah. So close is the resemblance, in fact, that Naville may easily be excused for thinking (erroneously, as later it turned out) that the Osireion was actually a building of the Old Kingdom. The low transverse hall at its further end, which he discovered, with its beautiful relief sculptures of the time of Seti I, must of course be of the Nineteenth Dynasty, unless it were an old building merely decorated by Seti. Naville was assisted in this work by G. R. Wainwright and by Capt. Gibson as engineer. He did not quite finish it, again; but this time it was from no wish of his own. It was the outbreak of the Great War that put a stop to his excavation of the Osireion: and after the war other commitments at El-'Amarnah prevented our finishing his work at once. When it could be taken up again, to be brought to a conclusion, he was too old to go out, and Mr. H. Frankfort has completed his work, with the assistance of Mr. Felton as engineer. Frankfort has found indisputable proof that the whole building, in spite of its archaic appearance, was erected by Seti. It is in fact his funerary temple at Abydos, and the transverse gallery with its sculptures, at the foot of the great temple which he built, is his cenotaph. Naville saw the completion of his work. It is much to be regretted that he could not himself complete it, but his great age forbade this. The excavation of the Osireion, of which by far the greatest part is his discovery and his digging, was a worthy crown to the work of a long

career in the field. His natural nomination as one of our Vice-Presidents was a great pleasure to him.

Naville's association with British work was characteristic. Few who did not know him, or know something of him, realized, probably, that he was not an Englishman; so closely did he identify himself with this country. As a Swiss Protestant of course he had obvious connexion with Evangelical circles in England. He was a past President of the Evangelical Alliance, and for a time in his youth was a student at King's College, London. This special connexion with England was maintained throughout his life. He never lost his affection for and interest in this country. From religious matters his sympathy with a certain party among us spread to the politics of another, the party with which, as a Genevese of means, connected with many Protestant families of importance, financial or noble, in Switzerland and Prussia, he naturally sympathized: the Tory party. In his English *avatar* Naville was a true-blue Tory, and the Imperialist movement of the 'nineties found in him a strong adherent. During the Boer War he was one of the few prominent Continental men of learning who actively sympathized with the British point of view, so much so that he contributed articles in our favour to the *Journal de Genève*, and wrote numerous pamphlets in our defence and had them translated into most of the languages of Europe, thereby doing the British cause service of undoubted magnitude, and incurring considerable odium himself. In the Great War his sympathies were of course with us and France: but as a neutral, and as one of the directors of the International Red Cross, he could not show them so openly. In the war of 1870-71 he had as a captain in the Swiss military forces helped to escort the prisoners of Bourbaki's army in their winter retreat into Switzerland after his defeat by v. Werder near Dijon. So that he had seen something of military life and a little of war or its results: enough to make him all his life a profound sympathizer with the work of alleviating the sufferings of the wounded, associated by the Geneva Convention with the name of his native city.

Work for a British or Anglo-American Society was then quite natural to him, as of course it is (even without his special connexion) to citizens of small countries in which national enterprises of this kind are not so usual as in the big countries. As an Egyptologist he was of course a great asset to the Fund. His name already was prominent in Egyptology in 1882, and he always remained one of the great figures of the scholarly side of the science. He was primarily a scholar: an excavator and archaeologist secondarily. Yet as an excavator he was certainly better known to the public than as a scholar. He took up excavation when he was over forty years of age, modelling his work on that best known to him, that of Mariette and Maspero and Schliemann. The new ways were not yet. And he was never altogether convinced that they were the best ways. At any rate they were not the best for him; so he went on in his way, leaving other ways to others who preferred them. He was of the generation of Maspero, and began to produce about the same time as he, *i.e.* about 1870, and like all the men of that generation, was a connoisseur and scholar, not an anthropologist. As a student at Bonn, after his stay in England, he had studied in the German way, and his Egyptological master was the great Lepsius, whom he always regarded with reverence, and whose literary executor he was. His first attention was directed towards religious texts, and his edition of the texts relating to the *Mythe d'Horus* at Edfu, published in 1870, and his collated edition of the Eighteenth Dynasty *Todtenbuch* (1886) are among the great Egyptological works of the century. His first visit to Egypt was in 1868, when he copied the Horus texts at Edfu. The *Litanie du soleil*, texts from the Theban royal tombs, appeared in 1875. He was as conservative in his scholarship as in other matters, and never forgave the modern German Egyptologists for improving

upon the science of Lepsius and Brugsch so far as to claim a Semitic origin for the Egyptian language, a very doubtful "improvement," to his mind, and one against which he fought tooth and nail till the day of his death. For Naville was a vigorous controversialist, and if he thought an idea was wrong he said so with emphasis. The result was long controversy with the "Berlin School," by whom however he was always treated with courtesy. And he contributed to the pages of the *Aegyptische Zeitschrift* as freely as to other journals. Nor did he always come off second-best in the argument, by any means. But his opposition was extreme, and he could see no good idea at Berlin, no, not one. So that the proposals of Sethe and Breasted with regard to the Thutmosid *Thronwirren* were opposed by the excavator of Dêr el-bahrî as vigorously as had been those of Erman and Sethe on the language by the scholar at Geneva. And here again he struck shrewd blows, and got by no means the worst of the argument on the whole, though on certain points the verdict must be given against him.

Yet it must not be supposed that he was a contentious man. He honestly thought that the German School was wrong on certain points, and thought it his duty to say so. He thought that Petrie and he were right about the Route of the Exodus, and so did most others, till recently, when further critical research has made it by no means so clear as it seemed at first that the Exodus took place in the reign of Meneptah and followed the course they marked out for it. Others are beginning to think that possibly Manetho and Josephus were right, and that the Exodus is really nothing but the Expulsion of the Hyksos looked at from the Hebrew angle of vision. If so, it took place *c.* 1580 B.C., which is certainly more probable than so late a date as *c.* 1225 (really, as Burney pointed out, even rather later), which is what Naville had to suppose. The middle view that it must have taken place about 1440 B.C.—in the reign, therefore, of Amenophis II—is one that no Egyptologist can accept, and that Naville would rightly out of his knowledge have rejected with decision, because to us that is the one time when such an event cannot possibly have happened, since that was precisely the time when Egyptian rule in Palestine was least contested, when in fact a *pax aegyptia* ruled the whole of the Near Eastern world. And the route is now generally deflected, in the minds of some of us, northward along the Mediterranean coast through Pelusium, the way the Hyksos fled. Whether afterwards they went south across the Wilderness to the traditional Sinai, or got into the region north of Akaba, if the true Sinai lies in that direction, is another matter. But in its time Naville's route to the Red Sea seemed to clear up all difficulties, and his date was generally accepted, until the discovery of the "Israel-Stela" by Petrie at Thebes in 1896 showed that in the reign of Meneptah Israel was already a people of Canaan, so that the Exodus can hardly have ended his reign. We may still accept part of Naville's view, for Ramesses II may still have been the Pharaoh of the Oppression, even if not his successor Meneptah, but his predecessor by two centuries, Amosis, was the Pharaoh of the Exodus. For there is no doubt that during the period of the Nineteenth Dynasty, when as we know from recent excavations Seti I and Ramesses II held down Palestine with their chief fortress at Bethshean, many trains of Canaanitish prisoners must have been passed into the land of Goshen to work at the buildings of the great king, and among them no doubt many Hebrews and Israelites (the *Aperiu* of the inscriptions?). And of their labour a tradition would have survived that has in the connected story become intermingled with the older tradition of the stay in Egypt.

Such a theory would hardly have commended itself to Naville, who was conservative in the matter of Biblical criticism, as in all other things. In fact he was generally regarded as an opponent of the "Higher Criticism," though in reality only of its more extreme

manifestations. He wrote a good deal on the subject of Biblical origins, and his pet theory, that the Pentateuch was originally written in Babylonian cuneiform, was expounded in the Schweich Lectures which he delivered here during the war, in December 1915.

Naville was a big man personally, of imposing presence and strong features. An Egyptian sight that never failed to cause a smile, first and foremost on the face of the great man himself, was Naville riding a very small donkey: the contrast was piquant. His brown topi, tweed Norfolk jacket, and full trousers were well known in Egypt, and his attire there never altered any more than did his grey morning-coat and square hard felt or top-hat in England. The tall figure with the pince-nez on the prominent nose, the benevolent face framed in old-fashioned side-whiskers which he shortened considerably of late years, and with its close-clipped reddish-grey moustache, will be missed by many of us, and more especially by those who worked with him. In all his work he had the help of his devoted wife, whose labours as a copyist of inscriptions are well-known to all users of his publications. The sympathy of the Society is tendered to Madame Naville in full measure.

Naville was Professor at the University of Geneva, a doctor of several universities both in Britain and abroad, an Hon. F.S.A., and Vice-President of our Society. The distinction of which he probably was most proud was that of a Foreign Associate of the Institute of France.

Plate ii, Fig. 1 shows him in a characteristic attitude at Dêr el-bahrî: in Fig. 2 he is seen with Dr. Schweinfurth, the African explorer, at the old German house at Kurnah. The admirable portrait in our frontispiece we owe to the kindness of Madame Naville.

H. R. HALL.



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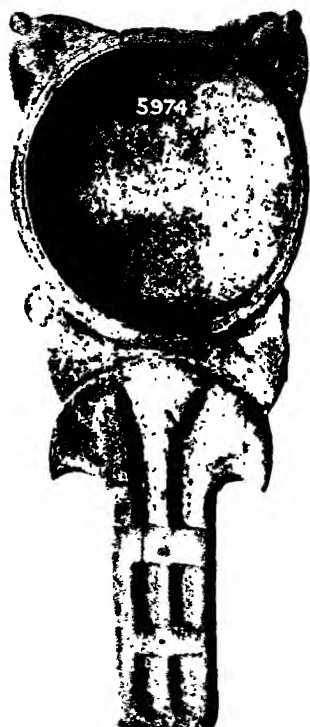
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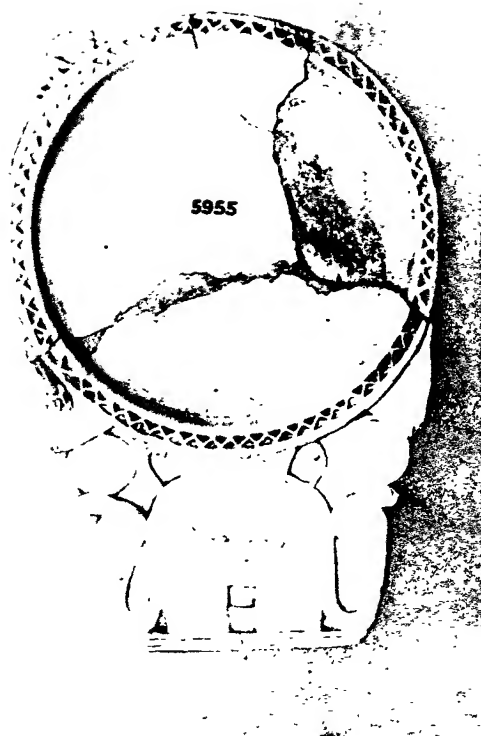
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1. Professor Naville at Dêr el-Bahri.
2. Professor Naville and Dr. Schweinfurth.
3. Professor Valdemar Schmidt.
4. Mr. Somers Clarke at the temple of Amenophis III
in the desert near El-Kab.

5974



5973



5975

5955

Ointment-spoons in the British Museum.

Scale: 5973 and 5974, c. $\frac{1}{2}$; 5975 and 5955, c. $\frac{1}{4}$.

THE OINTMENT SPOONS IN THE EGYPTIAN SECTION OF THE BRITISH MUSEUM

By MADELEINE FRÉDÉRICQ

With Plates iii—ix.

The richness and variety of the decoration of Egyptian ointment spoons justify a special study of these products of industrial art. Few objects indeed display more decorative imagination; it would seem that the observation of the artist is constantly on the alert to discover some new method of treatment or to give fresh detail to a theme already employed.

The decoration of these trifling objects, never intended to play any part outside the limits of the private life of the Egyptian, throws a singularly brilliant light on the surroundings in which his existence was passed. Here there is no preoccupation with the effect to be produced, no convention which the artist must follow; the pure delight of the eyes inspires these little masterpieces. Their diversity and the richness of their ornamentation do as much credit to those who executed them as to the public whose requirements were of so refined a nature, and it is surprisingly instructive, to those who would properly understand the artistic sense of an entire race, to observe this common striving towards beauty applied to the most trifling details of private life.

The artist who conceived these implements of a few centimetres in length succeeded in introducing into their ornamentation an infinite number of combinations; sometimes they take their theme from the flora or fauna of the country; at other times one finds represented on the handles of the spoons male figures treated with a consummate knowledge of pose, or female figures rendered with a freedom of expression and a suppleness of movement which raise an everyday object to the level of a work of art.

The British Museum possesses a remarkable collection of ointment spoons. In this single group the diversity of types which is offered us enables us to appreciate the full importance of their decoration. The present catalogue is only the first stage of a more extended study. It presents in itself a collection the diversity of which will not fail to astonish the reader accustomed only to conceive of the ointment spoons as represented by the few examples constantly represented in text-books of Egyptian art.

I propose, in a more comprehensive work, to describe and illustrate photographically as many spoons as possible, to group the subjects which have been used in their decoration, to study the material of which they are made, to determine the period at which they appeared in Egyptian civilization and that during which they had their greatest vogue, and to draw, it may be, from their examination, some conclusions as to the evolution of Egyptian art as a whole, all of which questions it would be premature to treat on the strength of the examination of about fifty examples. The examination will only be complete when one has been able to compare the spoons of the British Museum with those of the Louvre and the museums of Berlin and Cairo. I take this opportunity of thanking heartily Dr. H. R. Hall, Keeper of the Egyptian and Assyrian Antiquities in the British Museum, who has enabled me to undertake this work by authorizing me

to publish for the first time the beautiful collection of spoons in his care; also the Egypt Exploration Society, who have agreed to accept this article in their *Journal* and have illustrated it with such a large number of remarkable photographs. In addition to the spoons described below, the British Museum possesses two examples of spoons which Mlle Mogensen of Copenhagen is to publish (Nos. 37924, 38188).

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DESCRIPTION¹

5975. Pl. iii. Ivory. Lth. 12·4 cm.

Spoon consisting of an oval-shaped bowl edged by a dog-tooth design. The handle is formed of 7 stems of water plants. Two flower buds complete the bunch, joined by two ties in the middle of the stems. Two birds fill the angles formed by the bowl and the handle.

Bowl broken in the upper part. Handle intact.

5957. Pl. v. Ivory. Lth. 9·5 cm.

Fragment of a spoon; small male figure, naked and full face, carrying on its head a mussel-shaped shell which it supports with both arms raised. The right arm is broken. The figure rests on a floral capital which must have surmounted a round and thin stem. The right arm is missing, as also is the handle of the spoon.

5955. Pl. iii. Ivory. Lth. 11 cm.

Spoon with a circular bowl edged by a dog-tooth design. The handle consists of a Hathor-head seen full face. The head is adorned with two uraei. The angles between the bowl and the handle are filled by lotus flowers surmounted by *Mimusops* fruit. The handle has possibly been shortened.

5963. Ivory. Lth. 27·5 cm.

Small spoon in the form of an elongated shell (mussel) with a circular stem ending in a duck's head. WILKINSON, *op. cit.*, II, 46, Fig. 312, 3.

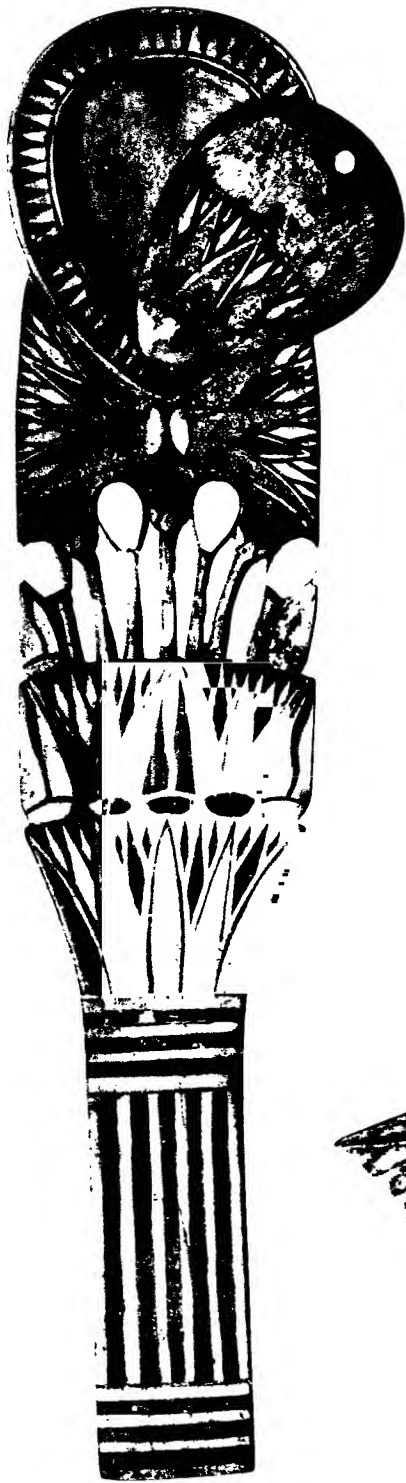
32147. Ivory. Lth. 6·5 cm.

Small spoon in the form of a duck or goose trussed for sacrifice. The body is hollowed out and forms the receptacle. The feet are bent round on to the back of the body, on which are also two hands, with arms stretched out and broken above the neck; these must have belonged to a female swimmer forming the handle of the spoon.

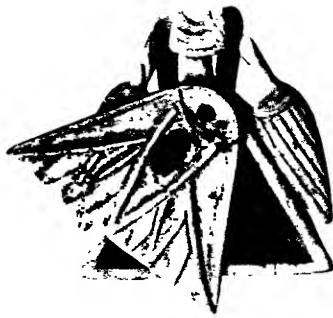
5972. Pl. iv. Wood. Lth. 5·7 cm.

Fragment of a spoon in the form of a lotus flower with a bud on each side—trace of a pivot at the base of the flower. The central subject, consisting of the full blown flower, forms the lid of the bowl. On the back of this two open hands coming from out-stretched arms (broken) indicate that the handle of the spoon was formed by a female swimmer

¹ The spoons are described in the order in which they were exhibited at the moment of my visit, and the numbers given are those of the Inventory.



5965



5972



5966

Ointment-spoons in the British Museum.

Scale: c. $\frac{1}{3}$.

5956

5957



5976

5967

50985

5968

Ointment-spoons in the British Museum.

Scale. c. 3.

pushing before her a bouquet of flowers. Trace of incrustation in green paste. Handle broken off. WILKINSON, *op. cit.*, II, 46, Fig. 312.

26783. Wood. Lth. 13 cm.

Circular bowl with handle undecorated and splintered.

38189. Wood. Lth. 10·5 cm.

Fragment of a spoon consisting of a lotus surmounted by the fruit of the *Mimusops*. The whole forms a lid with traces of rivets at the base and at the top. Trace of incrustation in green and white paste, green for the petals and white for the interstices of the petals. The handle and the bowl are missing.

5976. Pl. v. Wood. Ht. 13·5 cm.

Spoon of indefinable shape; does not seem to be a floral motif; might be a reminiscence of the sceptre. Decoration of the bowl and of the handle formed by four groups of incised bands, of which three are on the handle. WILKINSON, *op. cit.*, II, 45, Fig. 31.

5968. Pl. v. Wood. Lth. 15 cm.

Spoon with oval-shaped bowl, the point turned down. Handle in the form of a lotus sceptre (?). Perhaps a representation of the sistrum.

5959. Wood. Lth. 8 cm.

Spoon with circular bowl. Short handle formed by a hand holding a bowl. The handle ends in a duck's head. From Thebes.

5974. Pl. iii. Wood. Ht. 14·5 cm.

Spoon with circular decorated bowl. Two falcons right and left on the upper part of the rim. Handle formed by three flower stems held by two ties. Two flowers horizontally arranged fill the angles between bowl and handle.

5978. Pl. vii. Wood. Ht. 13·5 cm.

Spoon in form of royal cartouche. Bowl with border of dog-tooth. A cluster of flowers supports the bowl. Traces of greenish blue incrustation.

38186. Pl. vi. Wood. Ht. 28·9 cm.

Spoon in the form of a female swimmer of negroid type, pushing before her an aquatic fowl (duck?). Hair in plaits carried on to the back of the head. Round ear-rings. The lid, forming the wings of the duck, is missing. Traces of three rivets. Specimen damaged. *Guide*, 84, No. 36.

12564. Wood. Ht. 17 cm.

Plain spoon with oval bowl; handle undecorated.

5967. Pl. v. Wood. Lth. 16·5 cm.

Bowl consisting of an elongated lotus bud, flanked by two smaller buds the stems of which are entwined round the principal stem forming the handle. H. FECHHEIMER, *op. cit.*, 150.

5960. Wood. Lth. 15·5 cm.

Bowl in the form of a shell (mussel). The round handle ends in a duck's head drawn back on the stem. Handle broken in the middle; both fragments are preserved.

5973. Pl. iii. Wood. Ht. 12.3 cm.

Spoon with round bowl edged by a zigzag pattern. The bowl has at its upper edge to right and left respectively a falcon with spread wings, and a quadruped lying down. Two lotus flowers are placed horizontally under the bowl. A single stem joins them, forming a loop, which constitutes a short handle.

5969. Wood. Ht. 11 cm.

Fragment of spoon. Handle consisting of two flower stems coming from a plain basket¹. The stems are broken before their opening into flowers or buds. They are fastened by two ties. Traces of incrustation in blue paste on the ties. The bowl and the flowers which hold it are missing.

5979. Wood. Ht. 11 cm.

Bowl in the form of a royal cartouche with dog-tooth border. The cartouche is held by three lotus flowers the stems of which must have formed the handle. A horizontal bunch of flowers separates the handle from the cartouche. The handle is missing.

21968. Wood. Lth. 5.5 cm.

Lid of circular spoon: rosette or open flower on a stippled background, interspersed with a decoration of half and quarter petals. Two incised lines surround the design. The object doubtless served as a lid to a spoon with a circular bowl, now lost. At the back there still adheres some hard matter (soapstone? wood?) torn from the receptacle which the lid covered.

4720. Serpentine of greenish grey colour. Lth. 10.5 cm.

Fish with ointment-cavity sunk in the hollowed-out body: incised scales and fins above and below. No sign of lid.

5970. Wood. Lth. 10 cm.

Oval bowl edged with a dog-tooth border. Of the handle there remains only a lotus flower supporting a cluster of flowers placed horizontally. Handle partly broken, also cluster. Bowl chipped.

5971. Wood. Lth. 10 cm.

Oval bowl surrounded by a flat rim decorated with lotus flowers and buds. Handle broken at the base of the bowl, which is itself chipped. Trace of incrustation of blue paste.

5954. Pl. vii. Wood. Ht. 18.8 cm.

Spoon with representation of the god Bes. Oval-shaped bowl, the point turned downwards, surrounded by a dog-tooth design and held by a cluster of flowers. Rivet at the base of the bowl. Two aquatic fowl, one on each side of the cluster, join the bowl to the handle. The handle consists of a figure of Bes seen full face in the usual squatting attitude, the two hands on the thighs. Two lotus flowers and two buds form a portico. Trace of blue in the flowers and in the dog-tooth and the beard, and of red in the buds. The lid is missing. *Guide*, 84, No. 49; WILKINSON, *op. cit.*, II, 13, Fig. 382.

5962. Pl. ix. Wood. Lth. 24 cm.

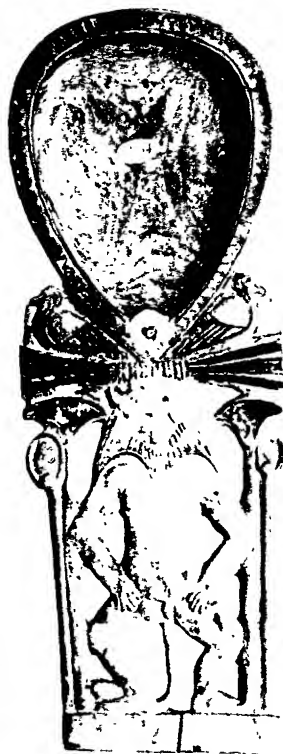
Spoon with handle in the form of a human arm. Bowl consisting of a depression in the form of a shell. The index finger of the hand stretches out over the under part of

¹ What we suppose to be a basket is perhaps a very compact bundle of stems the details of which were originally shown by painting, now effaced.



Ointment-spoon No. 38186 in the British Museum.
Scale: c. 5.

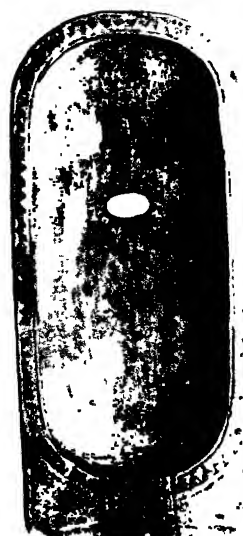
5954



5953



5958



5978

Ointment-spoons in the British Museum.

Scale: c. $\frac{1}{2}$.

the bowl, the thumb over the upper. Finger nails indicated. The round handle ends in the head of a serpent (?). *Guide*, 84, No. 50.

5965. Pl. iv. Wood and ivory. Lth. 30.4 cm.

Spoon in the form of a made-up bouquet. Basket¹ from which emerge two lotus flowers and three lotus buds, surmounted by six smaller buds (?). Four of them are formed of a pink substance applied on the wood in slight relief (no doubt painted ivory). Bunch of lotus flowers and leaves placed horizontally supports the oval bowl with dog-tooth design. Ivory pivot at the base of the bowl. Ivory button at the top serves as knob to the lid, which is formed of lotus flowers surmounted by fruit of the *Mimusops*. Colours still very bright. Light green for the leaves and the basket, dark green for the flowers, bluish green for the dog-tooth design. Two shades of pink for the ivory appliqué (perhaps imitation of poppy petals, *Papaver Rhoeas*). *Guide*, 85, No. 52; WILKINSON, *op. cit.*, II, 14, Fig. 283.

5966. Pl. iv. Wood. Lth. 28 cm.

The receptacle of the spoon consists of a lotus flower surmounted by fruit of the *Mimusops*. The flower and the *Mimusops* are in two parts, sliding the one on the other, and held by a pivot at the base of the flower. Two lotus buds flank the flower. The three stems forming the handle are held by a tie made of nine ribbons. Green incrustations for the sepals and the lines indicating the flowers and buds. The base of the flowers is painted red (not incrustated). In the same way, between the petals and on the *Mimusops*, touches of red separated by incised lines. The same decoration is reproduced on the back of the spoon, but merely indicated by lines and stippling incrustated with green. No large surfaces incrustated. Also traces of red. *Guide*, 85, No. 53; J. CAPART, *op. cit.*, Fig. 10.

21972. Pl. ix. Wood. Lth. 22 cm.

Plain spoon, deep oval bowl. Handle in the form of the foot of an ox, ended by the hoof of the animal.

5961. Wood. Lth. 23 cm.

Spoon formed by a shell held by a hand, the index finger stretched out under the back of the shell. The hand merges into an arm with four incrustated lines of green at the wrist, forming a bracelet. The handle ends in a duck's head bent back, decorated by three incrustated lines. In the shell a fish and some lotus flowers, incised in light and sketchy lines.

5953. Pl. vii. Wood. Ht. 18 cm.

Spoon representing the god Bes. Twin bowls in the form of two coupled cartouches. Birds and papyri are incised in the cartouches. Two figures of the god Bes, seen side face, looking towards each other, decorate the handle. They hold clubs in their hands; signs of protection hang from their arms. Each figure is in a separate frame decorated by incised lines. In the outer angle of each frame the sign *nefer*. Remains of incrustation of white paste still fill the incised lines. In the bowls, remains of wax (?) or ointment (?). *Guide*, 85, No. 56.

5958. Pl. vii. Wood. Lth. 18 cm.

Spoon in the form of a royal cartouche. Bowl with edge decorated by three lines which once contained coloured matter. Two fish (face to face) and aquatic flowers are

¹ The same remark applies as for the basket previously described under No. 5969. See p. 10, note 1.

incised in the bowl. Traces of greenish blue paste incrusting in the lines. The short handle is formed by a gazelle seen from the side and lying down, the fore-part turned towards the right. The bent head rests between the feet. From Memphis. WILKINSON, *op. cit.*, II, 15, Fig. 285.

5956. Pl. v. Wood. Lth. 15.5 cm.

Portion of spoon. Bowl of irregular form, perhaps suggesting the corolla of a flower. Traces of four rivets, two at the base and two at the top. On the handle small female figure, naked and front face. Eyes incrusting with paste, white for the eye-ball, black for the iris. The bowl is placed on the head of the figure. The lifted arms are broken. The tips of the feet are missing. Specimen defective and very much damaged.

5977. Wood. Lth. 13 cm.

Bowl in the form of a royal cartouche. No handle. Specimen very much damaged.

42156. Black composition. Lth. 4.4 cm.

Bowl in the form of fruits (grapes?).

5951. Ivory. Lth. 13 cm.

Duck in ivory; head drawn back; body hollowed out to form the bowl. Three lines round the bowl, and traces of rivets. Hollowed surface no doubt contained incrusting paste. Lid missing, bowl very much chipped.

5952. Pl. viii. Wood. Lth. 18.5 cm.

Spoon with handle in the form of a fish. Round and shallow bowl, without decoration, and very much damaged. The handle in the form of a fish with dorsal fin. Two lotus flowers fill the angles formed by the bowl and the handle. The back is not decorated. The lid is very much deteriorated. Trace of rivet. From Thebes. *Guide*, 85, No. 63; WILKINSON, *op. cit.*, II, 16, Fig. 260.

26770. Wood. Lth. 13 cm.

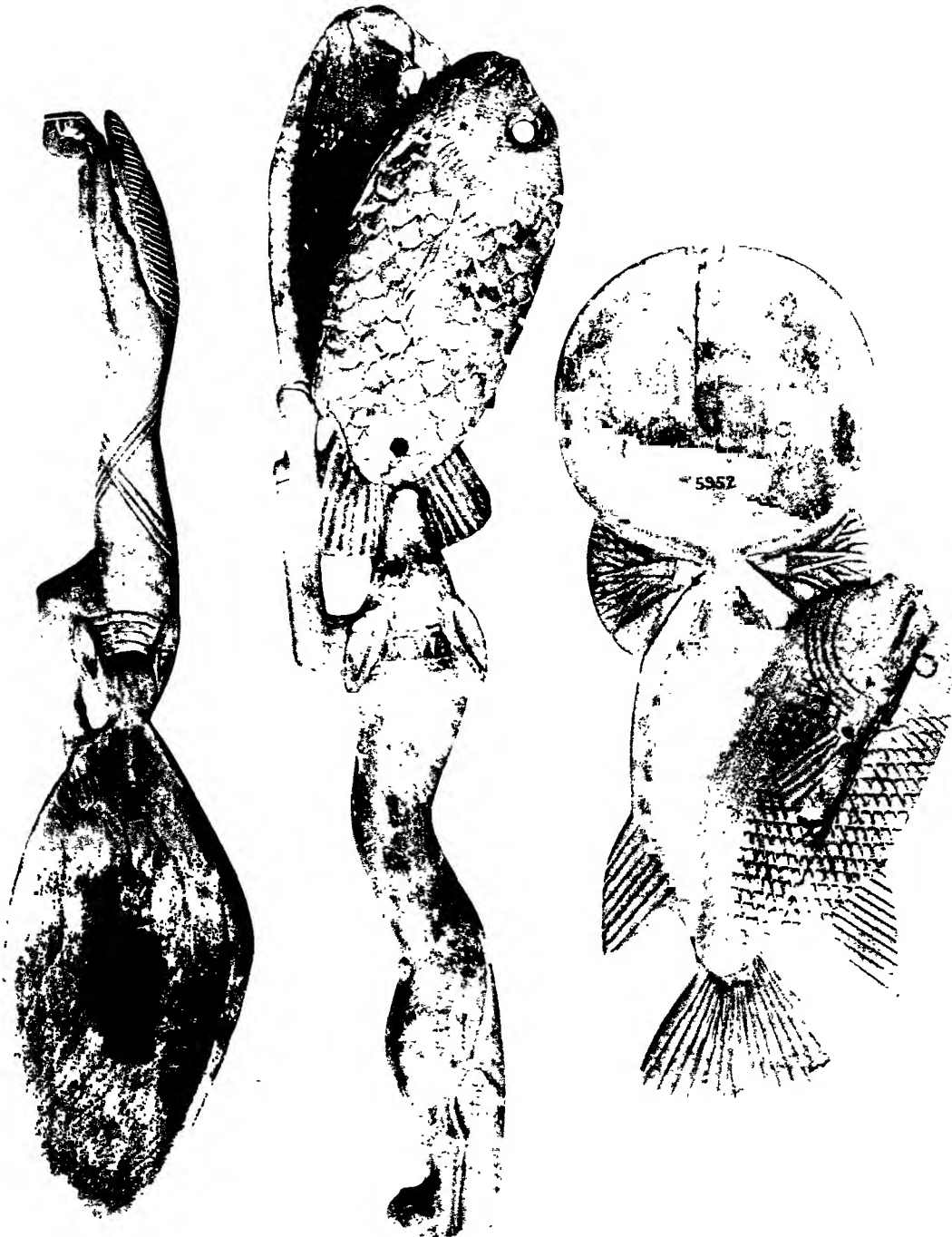
Spoon in the form of a duck. Traces of two rivets near the head and the tail. The body, hollowed out, forms the receptacle. Dog-tooth decoration round the bowl. Traces of incrustations of black and green paste. The bent back head has disappeared. The lid is missing.

38187. Pl. viii. Wood. Lth. 23 cm.

Spoon with handle in the form of a jackal or dog, a large shell held in its mouth forming the bowl. Four lines form a collar on the animal's neck. The head is seen from above and is consequently symmetrical. The body is turned sideways, seen from the right; the tail is thick and long. The two fore paws are placed symmetrically one above and one below the bowl. The hairs of the tail and the coat of the animal are shown on the front and back of the representation by incised lines. *Guide*, 85, No. 65; WILKINSON, *op. cit.*, II, 16, Fig. 387 (mentioned as belonging to Mr. Salt).

5945. Pl. viii. Wood. Lth. 26.5 cm.

Spoon in the form of a dog holding a fish by the tail. The fish, which constitutes the receptacle, is composed of two parts, one of which forms the lid; the body is hollowed out. The fins, tail and scales are indicated by incised lines and hollows still containing greenish blue paste which has served as incrustation. A rivet holds the lid to the tail; another, placed near the head, forms a knob to the lid. The dog's (or jackal's) head seen from above is symmetrical, while the body is seen from the left. A large collar with



38187

5945

5952

Ointment-spoons in the British Museum.

Scale: c. 2.

20757



5949

5962

21972

Ointment-spoons in the British Museum.

Scale · c. 5.

incrusted notches adorns its neck. The fish is seen from the side. Same decoration on the back of the spoon with indication of collar, scales, fins, and tail. *Guide*, 85, No. 66; H. FECHHEIMER, *op. cit.*, 144.

26368. Turquoise blue fayence. Shade lighter on the back. Lth. 4 cm.

Spoon in the form of a quadruped bound for sacrifice. A cavity in the body forms the bowl. The head is missing; the remains of a horn are still attached to the back. The reverse is well finished.

5949. Pl. ix. Wood. Lth. 11 cm.

Spoon in the form of a goose or duck, the feet bent back under the body, which is hollowed out into a deep cavity. The head is turned to the right and bent back along the body. Lid with simply decorated border. Peg holding the lid to the base of the neck. Trace of rivet or stud on the opposite side and on the tail. The reverse side is carefully finished, and the feet are indicated.

20757. Pl. ix. Wood. Lth. 16.5 cm.

Spoon in the form of a gazelle with feet bound for the sacrifice; the head turned to the right. The animal seems to be uttering a cry. Admirably realistic treatment of the muscles of the neck. The ears are deeply separated from the neck and the head. The body is hollowed out and forms the bowl. The horns are broken. The lid is missing; nothing indicates that there was one. No trace of rivet.

21940. Serpentine. Lth. 6 cm.

Spoon in the form of a fish, with incised indications of scales, eye, mouth, fins, and tail. The part forming the back of the animal in particular is carefully finished; it seems therefore to have formed the lid of a lost receptacle. Tail chipped.

21969. Wood. Lth. 9.5 cm.

Spoon with circular bowl decorated with three lines. At the upper end of the bowl on each side a decorative design. On the right an indistinct broken object, on the left an aquatic fowl. The handle, formed of flowers, is broken, the flower on the left hand still exists, as also part of the stem of that on the right hand. The handle no doubt presented the same form as that of spoon No. 5973.

5964. Ivory. Lth. 6 cm.

Small spoon with plain circular bowl without decoration. Bowl chipped. Stem curtailed. Circular handle.

50985. Pl. v. Wood. Lth. 25.8 cm.

Fragment of a very beautiful spoon with a female figure. The rectangular bowl has a flat rim decorated with a spear-head design. The bottom of the bowl is decorated with a lightly incised design of aquatic fowl; water is indicated. The handle, split from top to bottom like the bowl, shows the left arm of a young girl playing an instrument of music. A fragment of short plaited hair is also visible. The left leg is bent and naked. The rest of the decoration on the left is constituted by umbels of papyrus emerging from a basket (?) adorned with a spear-head decoration. Trace of green-blue paste in the decoration of the bowl, in the basket, and in the flowers. Half of the spoon has disappeared from top to bottom.

NOTES ON THE CHRONOLOGY OF THE ROMAN EMPERORS FROM VALERIAN TO DIOCLETIAN

BY HAROLD MATTINGLY

In that dark age of the Roman Empire, the middle and end of the third century, even the bare system of chronology is not free from contradictions and uncertainties. It has therefore seemed worth while to put together a few notes based (1) on the Roman Imperial coins, (2) on the Alexandrian coins, (3) on the issues of Viminacium and Dacia and (4) on the papyri, and, finally, to attempt to sum up the evidence and draw some of the main conclusions. The most serious point of debate seems to be this, whether the first Egyptian year of Valerian and Gallienus was A.D. 252 to 253 or 253 to 254¹.

(1) *The Roman Imperial Coins.* Valerian, who was Cos. III in A.D. 255, has coins with TR. P. III COS. II and TR. P. III COS. III; he was Cos. IIII in A.D. 257 and has coins with TR. P. V COS. III and TR. P. V COS. IIII². From this it is evident that his second tribunician year begins before the end of A.D. 253. Gallienus at first used his father's titles³: later, in his sole reign, he uses his own titles, which show that his tribunician power ran from the same date as his father's. He was Cos. VI in A.D. 264 and has coins with TR. P. XII COS. V and TR. P. XII COS. VI⁴.

We must next glance at the vexed question of the manner in which the Roman Emperors reckoned their tribunician power. The principle has been laid down that, from Trajan on, the first tribunician year runs from the date of conferment of the power to the next December 10th, and that subsequent years are reckoned from December 10th to December 10th. This view, though it has been generally accepted, will hardly commend itself to those who have studied the coins closely. It seems more probable that the normal practice was to reckon in full years, dating from the first conferment. It is impossible here to go fully into the question, but a single example, drawn from a period near the one we are studying, will prove illuminating. Trebonianus Gallus and Volusian both have TR. P. IIII in A.D. 253, the year of Volusian's second consulship. As the date of their accession was certainly somewhere about July A.D. 251, and as they reigned a little less than two years, it will readily be seen that on no normal reckoning can they reach a fourth tribunician year⁵. The only reasonable explanation seems to be that they carried on the tribunician year of Trajan Decius. This has in it nothing that need

¹ See the article by Arthur Stein in *Archiv*, VII, 30 ff. Some criticisms by the present author embodied in a review of VOGT's *Die Alexandrinischen Münzen* (*Num. Chron.*, 1924, 118 f.) are dealt with by Stein in the *Archiv*, VIII, 10-13. As Stein proposes a short shrift and a long drop for the counter-theory that I developed, it seems necessary to say something in its defence. If justice is too summary the innocent may suffer for the guilty.

² *I.e.*, TR. P. III is 254-255, TR. P. V is 256-257.

³ *Cp.* for example his TR. P. VII COS. IIII: Gallienus was Cos. IIII in A.D. 261 and cannot possibly have been TR. P. VII in that year.

⁴ *I.e.*, TR. P. XII is 263-264.

⁵ For even if we reckon TR. P. July-Dec. 251; TR. P. II Dec. 251-Dec. 252; TR. P. III Dec. 252-Dec. 253; TR. P. IIII only begins in December 253, by which date Valerian was certainly in possession.

surprise us, for Hostilian, the surviving son of Trajan Decius, who was adopted by Gallus as colleague, might be expected, on the analogy of Philip II, to carry on his father's dating; and, if Hostilian carried it on, could one expect Trebonianus to begin with a lower tribunician power than his young colleague? Now, if we reckon this continued tribunician power of Decius on the orthodox system, we get the following result:

A.D. 249	Sept. to December 10th	TR. P.
249	Dec. 10th to 250 Dec. 10th	TR. P. II.
250	„ 251 „	TR. P. III.
251	„ 252 „	TR. P. IIII.

This does not carry us, as we need to be carried, into A.D. 253. But, if we reckon

A.D. 249	Sept. to	250	Sept.	TR. P.
250	„	251	„	TR. P. II.
251	„	252	„	TR. P. III.
252	„	253	„	TR. P. IIII.

we obtain the result we need.

We have already seen that the second tribunician year of Valerian and Gallienus begins before the end of A.D. 253. On the view which we have tried to demonstrate above this implies a first conferment before the end of A.D. 252, when Trebonianus Gallus and Volusian were certainly still in power at Rome. We will consider later whether, despite that fact, our result may still hold good.

(2) *The Alexandrian Coins.* It will be best here to set out in tabular form what we believe to be the correct dating, and then to add the few comments that are required.

A.D. 251-252	Trebonianus Gallus	Γ
252-253	Valerian & Gallienus	A Aemilian (A) ¹
253-254	„ „	B „ B
254-255	„ „	Γ
255-256	„ „	Δ
256-257	„ „	E
257-258	„ „	Ϝ
258-259	„ „	Z
259-260	„ „	H Macrian II & Quietus A
260-261	Gallienus	Θ
261-262	„	I
262-263	„	IA
263-264	„	IB
264-265	„	IG
265-266	„	IA
266-267	„	IE Vaballathus (A)
267-268	Gallienus (IϜ) Claudius II A	„ (B)
268-269	Claudius II	B „ (Γ)
269-270	„	Γ „ Δ Aurelian A
270-271	Aurelian	B „ E
271-272	„	Γ
272-273	„	Δ
273-274	„	E
274-275	„	Ϝ
275-276	„	Z Tacitus A Probus A

¹ The dates in brackets do not actually appear on the coins.

276-277	Probus	B
277-278	„	Γ
278-279	„	Δ
279-280	„	E
280-281	„	Ϝ
281-282	„	Z
282-283	„	H Carus A, Carinus & Numerian A
283-284	Carus B, Carinus & Numerian B	
284-285	Carinus & Numerian Γ, Diocletian A	
285-286	Diocletian	B
286-287	„	Γ
287-288	„	Δ
288-289	„	E
289-290	„	Ϝ
290-291	„	Z
291-292	„	H
292-293	„	Θ
293-294	„	I
294-295	„	IA
295-296	„	IB

This system seems to be consistent in itself and to satisfy all the demands of the coins. On the analogy of the Roman coins, I take year Γ of Trebonianus Gallus to continue the reckoning of Trajan Decius and to represent A.D. 251-252: I think, however, that Aemilian's years must be A.D. 252-253, 253-254, not 251-252, 252-253, as I suggested in *Num. Chron.*, 1924. For a complete intermission in A.D. 251-252 (year B of Trebonianus Gallus, if he used his own date) no real reason has been suggested. Gallienus has a sixteenth year in Egypt, which however is not mentioned on the coins: the usurpation of Vaballathus supplies a plausible explanation, and we have what looks like definite evidence from papyri¹ that the year before the first of Claudius was the fifteenth of Gallienus. We have no need to postulate any disturbance of the normal reckoning in the reign of Claudius or Aurelian.

(3) *The issues of Viminacium and Dacia.* Both mints reckon from dates in the summer, July or later. For Dacia, we have the following years:

Trajan Decius V.
Trebonianus Gallus V.
Aemilian VII, VIII.
Valerian VI, VIII-X (or XI).
Gallienus VI, VIII-XI.

The sixth year, 251-252, is only represented by coins of Valerian and Gallienus. We naturally suspect that this is an error, but the absence of coins of Trebonianus Gallus of the year gives us pause. Aemilian has coins of the year VII (ending July (?) 253) and year VIII, and Valerian and Gallienus continue with year VIII. For Viminacium, we have the following years:

Trajan Decius XII.
Trebonianus Gallus XII-XIV.
Aemilian XIV, XVI.
Valerian XIV-XVI.

The sixteenth year of Aemilian seems to be quite inexplicable and may rest only on an error. Philip I, who was killed at Verona, near the end of Sept. 249, has a year XI

¹ P. Strassb. 11.

(249–250)—*i.e.*, the era date was before the end of September. Why then has Aemilian only year XIV, not year XV (252–3, not 253–4), for Egyptian coins of year B show him still in power in September?

(4) *The papyri*. This subject, which is handled with such mastery by Stein, lies away from my ordinary studies, and I propose to do no more than offer a few comments on the material, which he has placed at the disposal of scholars.

There can be no doubt that the first year of Valerian and Gallienus was sometimes reckoned as A.D. 253–254: Stein has placed this beyond question. But the Strassburg Papyri I, 7, 8, 10, 11, which assign 16 years to Gallienus, 3 to Claudius, 7 to Aurelian, seem to recognize A.D. 252–3 as Gallienus's first year. So too does P. Oxy. XII, 1407; for, although the Egyptian date, October 14th of the seventh year, is not necessarily of the same year as the Roman consular A.D. 258, it seems strange that an edict of A.D. 258 should not be published in Egypt until October 259. Again P. Strassb. 11 shows us the first year of Claudius as the year succeeding the fifteenth year of Gallienus. Stein has recorded, with exemplary fidelity, the evidence which can be brought forward against his own views; but, when he declares that there is no evidence in favour of A.D. 252–3 as the first year of Valerian and Gallienus, I am still obliged to dissent. He would probably lay stress on P. Strassb. 10. ll. 23–25, which gives us October 16th of Claudius's first year, which must presumably here be A.D. 268, as Claudius appears only to have come to the throne in that year. But this date is quite irreconcilable with the evidence of Alexandrian coins and must not therefore be stressed.

Stein has supposed that I had not noted the existence of a number of papyri dated to the second year of Trebonianus Gallus. This is not the case. Here again there seems to be a double system—(1) the official system of the coins beginning with A.D. 251–252 as year I, (2) the unofficial with the same year as year B.

To sum up. Both at Rome and Alexandria Trebonianus Gallus has dates, which are difficult or impossible to explain as his own, but which at once become intelligible, if we regard them as continuations of the dates of Trajan Decius. The tribunician power of Valerian at Rome seems to be reckoned from a date before the end of A.D. 252, his first year in Egypt seems to be A.D. 252–253. This would imply that, while Trebonianus Gallus still held Rome, Valerian was proclaimed in his province (Rhaetia) and acknowledged in Egypt. Aemilian, on conquering Trebonianus (*c.* June 253), was accepted in Egypt as well as in Rome, but had to give way to Valerian in the autumn of A.D. 253. The popular reckoning in Egypt often counted Valerian's reign only from this final conquest. Whether the year VI of Valerian at the mint of Dacia can be taken as evidence for his acknowledgment there in the summer of A.D. 252 must remain doubtful: perhaps, after all, we have only to do with a die-engraver's error. Trebonianus Gallus has, as our authorities tell us, nearly two years in Rome, but he was never recognized throughout the whole Empire. The literary tradition is too scanty to enable us to check the accuracy of these conclusions¹; derived, however, as they are from a close study of the coins, official documents of the first rank, they deserve careful attention.

Valerian's Egyptian coinage ends in his eighth year: at Rome, his latest dated coins are of TR. P. VII, *i.e.*, 258–259. The eighth Egyptian year then should be rather 259–260, than 260–261. Stein points out, in all probability rightly, that the usurpation of Macrian II and Quietus falls in the year H of Gallienus: papyri, he adds, also show it in year H, whereas, on my showing, they ought to indicate year Z. This does not, however, affect

¹ Zosimus, I, 2, 8, tells us that Trebonianus Gallus sent Valerian to Germany and Rhaetia to bring up troops against Aemilian.

my argument, for I hold that papyri follow either of the two datings—some the dating based on A.D. 252–253 as first year, some that based on A.D. 253–254. In the eighth year too ends the Egyptian coinage of Saloninus, who appears to have been seized and executed by Postumus after his successful revolt in Gaul. The dates of the Gallic Emperors are unfortunately uncertain, but the reconquest of Gaul by Aurelian seems certainly to fall in A.D. 273. The coins show us TR. P. X for Postumus, TR. P. III for Victorinus, TR. P. III for Tetricus, *i.e.*, on the system we have defended above, 13 complete years + three incomplete years,—not to mention a possible addition to be made for Marius and Laelian. We see ground then to place the beginning of the reign of Postumus in A.D. 258: Postumus's first year is 258–259, his tenth and last 267–268, Victorinus continues with 268–269, 269–270, 270–271, Tetricus with 270–271, 271–272, 272–273. A similar result is suggested by the legionary coins of Gallienus, on which the VI(VII) P., VI(VII) F. seem to record so many annual renewals of loyalty. The issue certainly was connected with the trouble in Gaul and ends in A.D. 258–259, thus confirming the result guessed at above. We should therefore expect Saloninus's last year (year H) in Egypt to be 259–260, rather than 260–261. The absence of coins of Gallienus of year 16 in Egypt can be readily accounted for by the usurpation of Vaballathus, whose later coinage indicates A.D. 267–268 as his first Egyptian year. After that all is in order in the Alexandrian coinage.

These brief notes on an intricate and doubtful subject have not been written in any spirit of contention against Stein, whose labours have earned the gratitude of all Roman students of the third century. It has, however, seemed only right to state in full some relevant considerations which he seems hardly as yet to appraise at their true value.



A Meletian Letter.
(Brit. Mus. Papyrus 2724).
Scale: $\frac{1}{2}$.

SOME FURTHER MELETIAN DOCUMENTS

By W. E. CRUM

With Plate x.

The interest aroused by the Meletian letters edited by Mr. Bell¹ justifies the publication of an additional Coptic letter, from the same *dossier*, subsequently bought by the British Museum, where it bears the number P. 2724. The script of this papyrus (v. the Plate) has some resemblance to that of P. 1922 (which significantly shows the same archaically reversed ϣ) and also to Rylands *Catalogue*, Pl. 4, nos. 270, 272. The address on the *verso* is on a larger scale, attempting more of an uncial style, but is doubtless by the same hand. The extreme measurement of the fragment is 23 × 27·5 cm. Pl. x.

Recto →

[τ]ιμοθεος πετсραι ππεμερι[τ π
 πρμαϊς[оп] π[μ]αϊκαιοσπн πρμ. τн. . . ш[
 етфори π[. . .]тс² петсрақкω π[с]ωϣ ππαπκoсмoс еϣωшт³ епапеппнот⁴
 е петсрақ[кω πс]ωϣ πпетшартакo еϣωшт епιαттакo петтрεϣιο⁵ πμοϣ
 5 πпетсш ероϣ етһепхисе те⁶ немпн[от]е петкω еһол пейпоһе пезшире
 етһетметпн[т] пте ппoтe петн[ω] еһол пеппара[птω]ма пезш[н]от
 етһеписашϣ π[ш]е πсоп петкω еһол петероот πпетрлоотіе етһепсе
 же ппетавт[ε]λιοп тепотсе пайωт еісраї пак⁷ еіпаракалеї πмок етһе
 жеаїе еһол ϣіт[о]тк екмoрз нрнт етһепoл етераїжoс тепотсе фтамо
 10 πмок жеπεραї[ж]oс ап еімеот[ε] епкроϣ алла таїжoс етһепшпне птмен
 трωме ϣсоотп [т]ар нсї⁸ ппoтe п[а]ї етпа† епеп[. . .] . . . епепρωме же
 ере жепмоп фпаракалеїсе н[мок .]н . . . н[κω]
 еһол пеппоһ[ε.]ж[. . .]λ етһе[псе]же ппет[авт]ελιοп . . .]б[]іе
 птама ппейс[. . .] . п. апиω . . . [17 letters]ωoтм. аτρη†
 15 ϣапτωһе н[. . .] . . . тһмен†[
 он [π]мок]татен[
 апа проот[.]іме ϣ[
 һапотп ек[
 м. ϣтe π. ара[

¹ In *Jews and Christians in Egypt*, 1924, 38 ff. (here cited as *J.C.*). Two improvements have been made in the Coptic texts there printed: P. 1921, 1, **петс[ραι]** (Prof. P. Jernstedt); P. 1922, 15, **μαισοτ** (Prof. C. Schmidt).

² Apparently not **фори** **ппеϣε**.

³ Here and in next line ϣ is a correction from κ.

⁴ Possibly **нем-**, as in l. 5.

⁵ This ϣ has the reversed form S, as in *J.C.*, P. 1922 and CRUM, *Short Texts*, 184.

⁶ For **пте**.

⁷ Corrected from **пек**.

⁸ Corrected from λ.

20]ρητη[
]. н . . р[
]. πωα[
]. πη.[

Along left margin

25 μαλα διосκορος μαλα γεροντ¹ μαθημιτριος . . . †[

Verso (at right-angles to text on *recto*)²

† τιμοθεος πετροδι ππεμεριτ η . . .³
 — — — παϊνω

"Timotheus that writeth unto his beloved⁴....., brother(?)-loving, righteousness-loving (-δικαιοσύνη)⁵.....who beareth (φορεῖν)...⁶; who hath renounced worldly things (κόσμος), looking toward things heavenly; who hath [renounced] things that perish, looking toward things imperishable: who humbleth himself unto such as be unworthy of him⁷ because of the height of heaven⁸: who forgiveth the sins of his children because of God's mercy: who forgiveth the trespasses (παράπτωμα) of his brethren (?) because of the seventy-times seven⁹; who forgiveth the debts of his.....because of the word of the Gospel¹⁰. So now, my father, I write unto thee, beseeching (παρακαλεῖν) thee; for when I quitted thee¹¹ thou wast grieved because of the lie that I had told. So now I would have thee know that I told it not intending deception, but (ἀλλά) I told it because of human shame¹². For (γάρ) God knoweth, that shall give.....of men whether Yea or Nay¹³. I beseech (παρακαλεῖν) [thee], then,.....for[give the sins...because of [the word? of the Gos]pel(?)[....."

Translation of ll. 15-23 is impossible. In 15 "concerning the bricks" may be read. In 17 the name "Apa Prow" seems to occur, in 18 "Anoup." L. 24 "...I wrote unto thee for this, that thou shouldest forgive me my sins....." (25) "and Apa Dioscorus and Apa Gerontius (?) and (?) Demetrius (?)...."

Verso. "Timotheus that writeth unto his beloved [father?] Paiêw."

The extant contents of the above letter are not important. Timothy, its writer, is concerned to persuade Paiêw¹⁴ that a falsehood, whereof he had been lately guilty, was due, not to premeditated guile, but merely to an impulse of timidity. The first eight lines

¹ *τρε*-very doubtful; *cf.* *τ* in l. 8. After *η* not †.

² The strokes above and below *ερα* are precisely half-way across the sheet and indicate the point at which the binding ribbon crossed the papyrus when folded.

³ Room for *ιωτ*. ⁴ "father," or "lord," or both.

⁵ I do not remember this epithet elsewhere.

⁶ Neither "Christ-bearing," so common in monkish letters (*Mon. of Epiphanius*, II, 373, *C.O.*, 50, n., etc.), nor "verily (ῥησμε) Christ-bearing," seems possible here.

⁷ *Cf.* Sirach xxv, 8 (11), ed. H. Thompson, *πετени ερω* ἀνάξιος αὐτοῦ.

⁸ Reminiscent of Lu. xiv, 11, or Ja. iv, 10.

⁹ Mat. xviii, 22.

¹⁰ Mat. vi, 12.

¹¹ *Lit.* "I quitted thee, thou being grieved."

¹² *Lit.* "the shame of humanity," man's natural timidity.

¹³ Reading *ξε...ξε*..., rather than *ξε...ξεν* (= *Ξην*). A reference to some biblical verse?

¹⁴ I think that Holl (Berlin *Sitzb.*, 1925, III, 18) must be right (*pace* BELL, *J.C.*, 51) in identifying Παηου̅ς-Paiêw with Παγε̅ς of P. 1913. *Cf.* 'Επιε̅ς='Εργε̅ς (GRIFFITH, *Rylands Demot. Pap.*, III, 190), 'Ιεου̅λ=Ιερο̅υλ (Gen. xxxvi, 18, Mumer).

are occupied with rather extravagant appeals to the recipient's reputation for clemency. Something more concrete may have followed—in l. 15 bricks are in question and in 17, 18 other persons are referred to. The letter ends (l. 24) with a final request for forgiveness.

Paiêw is clearly, here as elsewhere, a venerated personage, with moral authority in his community¹. Timothy, his supplicant—not necessarily himself a monk—occurs here only. Prow (l. 17) is presumably the monk greeted in P. 1914, 52²: Anoup (l. 18) might be the Anoubas of the same letter. A Dioscorus (l. 25) is likewise greeted in PP. 1916, 1918, 1921, and with him, as here, a Gerontius in P. 1918.

More interesting than what Timothy says is the idiom in which he says it: archaic (as might be expected in an unliterary text of the early part of the fourth century) and in some points comparable with that of the contemporary P. 1922³. Conspicuous in both is the perfect tense prefix $\rho\alpha\text{-}$ etc., for $\alpha\text{-}$. Here we find it as pluperfect $\mu\epsilon\rho\alpha\text{-}$ (10), relative $\epsilon\tau\epsilon\rho\alpha\text{-}$ (9), $\mu\epsilon\tau\rho\alpha\text{-}$ (3, 4) and presumably perfect $\rho\alpha\text{-}$ (24)⁴. Additional instances of this prefix known to me are: *Acta Pauli*, where $\rho\alpha\text{-}$ is frequent, but only before a nominal subject⁵; the Oxyrhynchus fragment of Romans, printed at the end of this article, as perfect and pluperfect; an early and interesting fragment, also from Oxyrhynchus, in the Hoskyns collection at Cambridge. $\rho\alpha\text{-}$, $\rho\alpha\text{-}$; B.M. 1111 (an otherwise Sa'idic text) $\rho\alpha\text{-}$ once; Ryl. 415 (Fayyûmic); Z.N.T.W., 1925, 84, 88 *J.T.St.*, 25, 226, 229; B.M. 580, 5, 6 relat. $\mu\epsilon\tau\rho\alpha\text{-}$, $\mu\epsilon\tau\rho\alpha\text{-}$, but context obscure. It appears to characterize an early stage of the idiom current throughout Middle Egypt and perhaps further south (*Acta Pauli*)⁶. Further to be noted are the hybrid forms $\mu\epsilon\mu\epsilon$ (7)⁷, $\mu\epsilon\tau\text{-}$ (6, cf. $\mu\epsilon\mu\text{-}$ 10), $\mu\epsilon\mu\text{-}$ (10), $\mu\mu\text{-}$ (3), $\tau\epsilon\tau\epsilon\mu$ (4): the use of $\mu\epsilon\mu$ as absolute (24): the unusual $\mu\epsilon\mu\text{-}$ (4, cf. R.O.C., 1914, 73 $\mu\epsilon\mu\text{-}$, Cod. Morgan 31, 122 $\mu\epsilon\mu\text{-}$): the Bohairic use of $\mu\mu$ (6) and of the forms $\mu\mu\text{-}$, $\mu\mu\text{-}$: also the doubled consonant in $\mu\mu\text{-}$ (9), as often in P. 1922, while in $\mu\mu\text{-}$ (5, 6) an $\mu\text{-}$ is omitted.

The only novelty to be had from this letter is $\rho\alpha\text{-}$ (7), a plural form comparable to Achm. $\mu\mu\text{-}$ (Sa'. $\mu\mu\text{-}$). One might expect it here to mean "debtors," or something of the sort; but I would suggest that it is the plural of $\rho\alpha\text{-}$ "servant," whereof elsewhere the singular form does duty as plural (Mt. xiii. 27. Apoc. vi, 15, Cod. Morgan 30, 51).

To the Coptic references to the Meletians already given⁸, I can add:

(1) The patriarch Alexander, in his Encomium on Peter I⁹, declares that Melitius ($\mu\epsilon\lambda\text{-}$) aimed at ($\epsilon\pi\text{-}$) nothing short of the archbishopric, in Peter's absence.

¹ BELL, *J.C.*, 43.

² *J.C.*, 70. The name is that of a saint invoked upon several grave-stones from Middle Egypt: QUIBELL-THOMPSON, *Saggar*, 1912, 61, n. 6, PELL, *Cemeter. of Abydos*, II, 38, G. MASPERO, *Musée égypt.*, II, Pl. XVI, TURATIEF, *Materiale*, no. 54. Perhaps the same name as $\mu\mu\text{-}$, C.S.C.O., 43, 202 so, not as ZOEGA, 30, $\mu\mu\text{-}$, thanks to Mgr. Hebbelynek's collation and as $\mu\mu\text{-}$ the martyr, HYVERNAT, *Actes*, 135.

³ *J.C.*, 97.

⁴ The reference, *op. cit.*, 97, to *Wadi Saggar*, needs correction: for *Zeitschr. f. ag. Spr.*, 1915, read 1914. Moreover Sethe pointed out (letter 8, 5, 23) that, in Job xxx, 9, the tense is present, not perfect.

⁵ Note on p. $\mu\mu$ 21, $\mu\mu\text{-}$.

⁶ Another abnormal, but merely phonetic $\mu\mu$ is found in Achmimic, separating vowels: $\mu\mu\text{-}$ Hos. viii, 4, Jo. xii, 9, $\mu\mu\text{-}$ Clement iv, 10, $\mu\mu\text{-}$ Zech. iii, 1; as in Sa'idic also: $\mu\mu\text{-}$, $\mu\mu\text{-}$, $\mu\mu\text{-}$ KRALL, XVI, $\mu\mu\text{-}$ B.M. 1123. In $\mu\mu\text{-}$, $\mu\mu\text{-}$, $\mu\mu\text{-}$ *Zeitschr. f. ag. Spr.*, IV, 71, $\mu\mu$ represents $\mu\mu$, as often in modern Egyptian Arabic.

⁷ Also in the Subachmimic St. John and in the above-mentioned Hoskyns fragment.

⁸ Cf. $\mu\mu$ B.M. 580, 599, $\mu\mu$ 1227, $\mu\mu$ CRUM, *Copt. MSS.*, XXXI; all Fayyûmic.

⁹ *J.C.*, 41-43.

¹⁰ HYVERNAT, *Actes*, 260.

Compare the words of the Hamburg text of the *Patriarchal History*¹: "And M., bishop of Asiût, descended upon (وثنب) the city of Alexandria and entered it, bringing money, which he distributed among a few folk, weak in faith and understanding; and they received him and he became their leader; and he found favour (اصلىح) with the clergy and carried out ordinations of bishops (للاساقة)." On this last matter cf. the Athanasian Epistle printed below.

(2) "Whoso saith that the Meletians (or Melitius) have a church, the same is accursed." So says the twenty-fifth of the Canons ascribed to Athanasius².

(3) But church discipline was evidently no longer the main ground of contention with the Meletians in later times; doctrinal heresies—presumably resulting from their fusion with the Arians—were ascribed to them, as can be seen in the sixth-seventh century Encomium by Constantine of Siut on the martyr Claudius³, a phrase from which is: "Flee the Meletians, that divide the indivisible Christ"; while the author, shortly before, tells how the Meletians "taught not to recite (μελετᾶν) from the Scriptures, but to say, 'The Father, the Son, the Holy Ghost,' dividing them one from another," whereas "the faithful (πιστός) divide not the Holy Trinity⁴." This same Encomium relates elsewhere⁵ that these heretics practised various abominations, such as using defiled animals for food. Sorcery too they were accused of, as we learn from the tales of their evil-doings current in the eighth century⁶.

(4) Heretical too were their doctrines as to the bodily Assumption of the Virgin⁷.

(5) The Twelfth Athanasian Canon forbids the singing of the hymns composed by "the Meletians and the ignorant and wandering (monks)⁸," showing that, like the Arians, their innovations extended to liturgical matters.

(6) The disciples of St. Antony protested against being confounded with Meletian monks⁹ and the Pachomian communities must have suffered from these heretics; for Horsiese, in his vision of hell, saw "those that had renounced the Apostles' teaching and hearkened to the Meletians¹⁰."

(7) Shenoute (*ob.* 451) reprobates the Meletians¹¹, "those brute-beasts," that take the sacrament up to 18 times a day, devouring it as bodily food; by whom many "of us" have been led astray (*cf.* the experience of Damianus, *J.C.*, 42), and he seems to refer to them as allies (κοινωνός) of the Arians¹². In his *Apocalypse* we read (perhaps) of a Meletian soul seen in hell¹³.

(8) Not the least interesting reference is that, again from bishop Constantine's Encomium¹⁴, wherein a priest confesses his unorthodoxy: "Thus have I secretly believed, thus taught me Marcion and that deceiver (πλάνος) Pilates (πιλᾶτης), the authors (ἀρχηγός) of the heresy of Melitius (μελιτιος)." To find a seventh-century writer making Marcion responsible for the Meletian "heresy" is perhaps not more surprising than many other historical confusions whereof Coptic writers of that age are guilty. But who is

¹ Ed. Seybold, 42, *supra*; not in Evetts's MSS.

² Ed. Riedel and Crum, 30.

³ *J.C.*, 42.

⁴ This from the B.M. fragt. of the text (no. 358).

⁵ Cod. Morgan 47, 154.

⁶ *P.O.*, v, 200.

⁷ CRUM, *Theol. Texts*, 11 n., 13 n.

⁸ *Op. cit.*, 24, *cf.* Arabic text, p 18. The rare word *capakwte* (comparable perhaps to *sarabaitae*) may designate the *girotagi*, of whom the orthodox church always disapproved. The preceding *جبال* would then be a mere guess at its translation.

⁹ *Mission franç.*, iv, 572.

¹⁰ WESSELY, *Stud.*, xviii, 52, translated by W. HENGSTENBERG in *Festgabe A. Ehrhard*, 1922, 229.

¹¹ *Rev. ég.*, xi, 17.

¹² Paris, 130⁵, 28; LEIPOLDT, *Schenute*, 87.

¹³ *C.S.C.O.*, 73, 202.

¹⁴ Cod. Morgan 47, 185.

Pilates? No trace of any one so named is discoverable in the church historians, nor does plausible emendation suggest itself. It is however to be noted that not only is Πιλᾶτος a not uncommon name among Egyptian Christians of the sixth-seventh centuries¹, but that this very form, Pilates, is twice met with². Only once does the name occur in the Theban neighbourhood³, once (presumably) in the north⁴; all other occurrences are from Middle Egypt, *i.e.*, from the provinces lying, say, between Achmim and the Fayyûm. This may be due to mere accident, but it seems more likely to indicate that the name was native to the middle country—where in fact the Meletian schism originated and appears to have maintained itself⁵. One is tempted to wonder whether the names Melitius and Pilatus (Pilates) may not be one and the same, the former—otherwise scarcely known in Egypt⁶—perhaps a euphemistic manipulation of the latter, whose biblical associations may have rendered it ill-omened for a bishop⁷.

This name "Pilatus" cannot but recall the tradition, lurking evidently in the Egyptian form of the Pilate legend⁸, that the procurator of Judea had in fact been of Egyptian origin. Of this claim—one is reminded of Jean Maspero's observations on Coptic national vanity⁹—traces may be seen in the Egyptian (Arabic) version of the *Gesta Pilati*, where the angry Jews appeal to Herod against "Pilate the king (*sic*), the wicked foreigner from the land of Egypt¹⁰"; and again, in speaking to Tiberius's envoy of Pilate's defence: "What profit thee his words, seeing he lieth unto thee in the Egyptian (Coptic) tongue¹¹?" See too Herod's contemptuous words: "A man of Pontus art thou, a Galilean (= Christian), a foreigner (ἀλλόφυλος) and Egyptian¹²." [Only when this was in print did I discover that E. Galtier had noted it and edited the Arabic text: *Mém. Inst. Franç.*, xxvii.]

(9) Athanasius, in two at least of his Festal Epistles, finds occasion to condemn Meletian iniquities: in the thirty-ninth¹³ he speaks of the apocryphal scriptures of which they boasted and in another¹⁴ he reprobates their sacrilegious traffic in martyrs' relics: "An

¹ Coptic texts: Ryl. 250, 338 (Siut?). KRALL, CLXVIII (Heracleopol.), *Sagqara ut sup.*, no. 182; Greek texts: B.M. (Copt. Cat.), nos. 1075, 1076 (Hermopol.), P. Lond., iv, no. 1419, v, no. 1661 (Aphrod.), P. Cairo, *saepe* (do.).

² CLÉDAT, *Baouit*, II, 159 and a Balaiza fragm. (Bodleian Copt. (P.) d 17).

³ WINLOCK and CRUM, *Monast. of Epiphanius*, no. 217. ΠΙΛΟΤΕ *Jême* 90, 28, seems more likely = ΦΙΛΟΘΕΟΣ; so too? ΠΗΛΩΤΩΤΟΣ Lefebvre no. 402.

⁴ HORNER's *Bahairic New Test.*, I, p. cviii, in a modern MS. of unknown *provenance*.

⁵ Though Melitius in his *Brief* does indeed claim followers throughout the length of Egypt.

⁶ Cf. PREISIGKE's *Namenbuch*, 212.

⁷ Initial π- is now and then replaced by μ- in Coptic, and oftenest in Middle Egypt; cf. *Monast. of Epiphanius*, I, 243, *infra*.

⁸ Fantastic developments whereof appear in a homily of Pseudo-Cyril Hieros., Cod. Morgan 44, 40 ff.

⁹ *Hist. des Patriarches*, 24 ff.

¹⁰ Cod. Vat. Syr. (Karshûni) 199, 351 (from photographs lent me, years ago, by Prof. von Dobschütz) **ملك الغرب الذي من ديار مصر**. The Ethiopic translation has *Pilātīs maṣarī* (B.M., Or. 690, 99a), "P. the magician," doubtless merely ill transcribed from **مصري** "the Egyptian." Melkite tradition did not apparently accept this; Eutychius gives Pilate an Italian origin: from an isle near Rome, named *Ponta* **بنطة** (ed. Cheikho in *C.S.C.O.*, I, 91).

¹¹ Paris *arabe* 152, 15a, **ما فایدتك بكلمه وهو یفتري عليك باللغة القبطية**.

¹² GUIDI, *From Copti*, 97 = FORBES ROBINSON, *Copt. Apoc. Gosp.*, 177 (v. 243) = P.O., II, 152. Similarly, though with more justification, the Copts make of Herod a Saracen: Paris 129¹⁸, 153, **σπνοσ μπραγμα-τεττης πσαρακεπος** (Br. Mus. Cat., 220 n.1. Ross-I, II, IV, 15. **επρωσνις πσαρακινος**).

¹³ Ed. CARL SCHMIDT, *Göttinger Nachr.*, 1901, 326 ff.

¹⁴ ZOEGA, CCLXXVII, fol. 2 (pp. 215, 216). That this is from the Festal Epistles is proved by its duplicate, Paris 129¹⁴, 90, one of four leaves (pp. 18, 19; 29, 30; 47, 48; [193], 194 respectively), from the same

"...ordain (χειροτ.) clerics (κληρικός) to dioceses other than their (the bishops') own. But this is naught else than biting and devouring one another and destroying one another, unless they cease to do this thing. For (γάρ) from unlawfulness (παρανομία) such as this come strife and envy and irritation (παροξυσμός), thereafter causes of disruption. Whereby not the churches (ἐκ.) alone are upset, but the monasteries (μονασ.) likewise: for them also hath the aforesaid recklessness¹ attained to. And who is it hath enjoined this thing upon them, or from what scripture (γραφή) have they been taught this? They will not be able to answer, for they have naught to say. But rather (ἀλλὰ μᾶλλον) they do this for gain², being enticed and beguiled (ἀπατᾶν) through their own lusts (ἐπιθυμία). For (γάρ) everything standeth in a right (*lit.* good) order and each created thing abideth even as it hath been set, as it is written³: the sun knoweth his place of going down and the moon doth hold the governance (ἀρχή) of the night⁴, overstepping not his limits; and for the waters likewise He hath set a limit which they may not exceed, according to the Psalmist's words⁵, nor may they return to cover the earth. And the mountains hath He measured with a measure and the valleys with a balance⁶; the body (σῶμα), (p. 195) even as Paul saith⁷, hath God compounded (συγκεραννύναι), having given greater honour unto the (part) which lacketh, so that there be therein no schism, but that the members (μέλ.) should have care one for another. So then (οὖκουν), seeing that (ἐπειδή) all creatures are rightly (καλῶς) ordered and there is none interfereth with⁸ his neighbour, neither seize they on the business (χρεία) one of another, but (ἀλλά) that the affairs of the churches (likewise) have their own allotted-parts (κληρος)—how is it not a shameful thing which the priests⁹ do, or how shall not any one justly (δικαίως) blame us, if we observe not the limits that have been set us? But (ἀλλά) not such was Paul; for after that he had fulfilled the ministry (διακ.) that had been committed unto him, he boasted and taught us, that we might have profit. For he writeth to the Corinthians, saying¹⁰: 'I will not boast' (sic expl.).

I will conclude with the fragment of Romans referred to on p. 21 above. It was found by Messrs. Grenfell and Hunt at Oxyrhynchus, in the early years of their work there and is written on vellum, in "fine, early uncials"—such is all that my copy, made at the time, has to tell. Professor Hunt kindly assents to my printing it.

The version clearly approximates to the Sa'idic, though divergent in detail. In 16 εἰσαλ and εἰρε- recall the Bohairic, while ποταπ νιμ, etc., is perhaps due to i, 16. In 17 ατα is characteristic of the dialect, and in 19 πωυς πρητ (usually ἀφιστάναι, ἐξιστάναι) is remarkable¹¹. For Sa' κα σομ in that verse one might here read ασοεπει. The use of πσα- in 24 for ἀλλά would be unique, preceding another preposition. Perhaps misread by me for αλλα.

¹ The qual. of ασαι thus, as a noun, is unknown to me elsewhere (*cf.* STERN, § 349, *sub fin.*). Evidently in an abstract sense; a "reckless person" would here seem incongruous. And yet the word cannot but remind us of the epithets used of Melitius himself in the Synodal Letter to the Alexandrine clergy (Socrates, i, 9=Theodoret, i, 9): τὸ πρόχειρον καὶ προπετές τῆς γνώμης. I do not understand this reference to monasteries.

² Or "advantage," "profit."

³ Ps. ciii, 19.

⁴ This reading is presumably a reminiscence of Gen. i, 16.

⁵ *Cf.* Ps. ciii, 9.

⁶ Is. xl, 12.

⁷ 1 Cor. xii, 24.

⁸ αἱ ε- διαφέρειν, μέλειν. Comparable to this is *C.S.C.O.*, 73, 209: οὐν ρωμε μματ ερηασι επετρητοω, presumably in a similar sense, though the context is aphoristic and rather obscure.

⁹ "Priests" perhaps stands for priesthood, including the bishops.

¹⁰ 2 Cor. x, 13-15 (text practically as in Horner).

¹¹ It recalls Boh. Ac., iii, 10 μετεβη εκστασις=Sa'. απωυς, while 2 Kgs. iii, 1 ρ ρηε=ασθενειν.



Head in sandstone.
Brit. Mus. No. 37883.

Scale: $\frac{1}{4}$.

THE HEAD OF AN OLD MAN (NO. 37883) IN THE BRITISH MUSEUM

By H. R. HALL

With Plates xi and xii.

One of the finest examples of Egyptian art of its period is the white quartzite sandstone head of an old man, No. 37883, in the British Museum, exhibited at the present time in the Fifth Egyptian Room on a special stand, as befits its pre-eminence as a work of art. It formed part of the Harris Collection, and was bought by the Trustees in 1875 with the rest of that collection. Its place of origin was very probably Thebes. Its date in my opinion is the Twenty-fifth Dynasty, *circa* 700 B.C.

The head is broken off from a statue, roughly life-size. The old man wears a rather heavy plain wig, the hair of which is wavy, not curled, and is disposed in six horizontal waves all round from the crown to the shoulders. It is set behind the ears, which are completely exposed and pushed a little forward by it, and comes down low on the forehead. The portrait is that of a man of between 70 and 80 years of age, judging from its appearance. The eyes are small, much wrinkled, and hollow; the face heavily lined, especially round the mouth; the skin is stretched taut over the cheekbones, which thus appear higher than perhaps they did in youth. Crow's feet are not indicated at the corners of the eyes: the skin was drawn too tight over the skull to show them. The nose was well-formed, prominent, and perhaps slightly aquiline, but is unluckily broken off at the tip. The mouth is small, tightly closed, the upper lip long, thin, but well formed, the lower lip comparatively full. The chin is small but well shaped; its lower portion is broken away.

The wig hides the wrinkles on the forehead, but the evidence of the eyes and mouth, and the prominent bony structure of the skull are enough to show us that the subject was aged. And the bust is one of the finest Egyptian portraits of an old man that exists, rivalling those of Amenophis son of Hapu and that of Nsiptah at Cairo. In one way it gives a more pleasing impression than those of Amenophis, since it is not so senile. This man, if not younger in age, is younger in spirit than the Eighteenth Dynasty sage, is more alert, more master of himself. And he is a much more intelligent and resolute and less self-indulgent person than Nsiptah. It is very much the face of a typical British judge in his seventies (a likeness to which possibly the wig contributes!). It is proud and composed, yet not unhumorous: the mouth has a slightly ironical, almost quizzical smile, rendered with extraordinary subtlety. It is determined, yet by no means devoid of human kindness; narrow in outlook, perhaps, but enlightened. In any case it is the face of a most intelligent member of the ruling caste of his time: that we can see at a glance.

The question is: when did he live? When the object first came into the British Museum, Dr. Birch very plausibly assigned it to the second half of the Eighteenth Dynasty. Now this was, given the uncrystallized knowledge of the 'seventies, a very good guess indeed, in view of what we have since learned of the peculiar character of the work of that time. But, though superficially it may remind us of the heads of Amenophis, it is questionable whether this was a correct attribution. Birch himself abandoned this view later in favour

of one that regarded it as a portrait of a Hyksos, because, forsooth, in the early 'eighties it was fashionable to regard the Hyksos, like the Hittites, as Mongols, to seek in their high cheekbones (if they had them) and the Hittites' pigtailed proof of the Mongolian origin of both, and to call everybody in ancient Egyptian art with high cheekbones a Hyksos, and everybody with a pigtail a Hittite. But just as other persons besides Hittites have worn pigtailed and have not necessarily been turned into Mongols thereby (I may instance Frederick the Great, King George III, George Washington, Lord Nelson, and in fact every European male person of the eighteenth century above the age of sixteen!), so everybody with high cheekbones and small eyes is not necessarily a Mongol, more especially when the eyes are not of the almond-shaped variety. And those of our ancient noble certainly are not that. They look small, but that is mainly because they are withered from age. The cheekbones are accentuated for the same reason, though no doubt in youth also they were high, since high cheekbones are common enough in Egypt.

While the Mongol character of the Hyksos was still credited the two great heads of a king with high cheekbones found by Naville at Bubastis and now, respectively, at Cairo and in the British Museum (No. 1063), were assigned to an Apepi. And the remarkable colossi found by Mariette at Tanis, the fish-bearers at Cairo, the bearded head at Rome¹, and the "Hyksos" sphinxes were all considered to bear this Mongol imprint. But now that it is obvious that the Hyksos were not Mongols at all, but Semites, the two Bubastite heads have been transferred from Apepi to Amenemhet III on the ground of their apparent relationship to Twelfth Dynasty portrait-heads, and possibly to Amenemhet's in particular. And the sphinxes follow them, the Hyksos name on them being but a later addition like others, but whether back to the Twelfth Dynasty or even further is not yet certain; while the strange fish-bearers, the Rome head, and their like have been pushed back to the archaic period of the Third Dynasty, on account of the undoubted likeness between their type and that of the head of king Zoser and other heads of that early dynasty found at Saqqârah by Mr. Firth². And our head under discussion must also be rescued from the Chinese associations into which it has been thrust. It is not Hyksos: that is quite certain. Is it not, however, Twelfth Dynasty, like the "Amenemhet" heads? There is a good deal to be said for this attribution. The type of wig is if anything in favour of it, the large size and the position of the ears are not against it. (We shall see however that their treatment is not characteristic of the Twelfth Dynasty.) The fact that the ears are not pierced is against the late Eighteenth Dynasty attribution of Birch, as most ears were then pierced, whereas under the Twelfth Dynasty this fashion had not yet reached Egypt. The wig is certainly more of the Twelfth than the Eighteenth Dynasty type, even that of the early Eighteenth. And the stark truth of the portrait would seem at first sight to guarantee a Twelfth Dynasty date. But if we look again and more carefully, I think we shall see in it a delicacy absent from Twelfth Dynasty work. And it is more sophisticated, so to speak, than that of the Eighteenth. There is a careful fineness and delicacy about it that we do not find until the work of the late Theban school in the early Saïte period. The known work of this school with which I would compare it are the heads of Montemhet or Mentumehet and his son Nsiptah at Cairo, the prince of Thebes at the time of the Assyrian sack in 663 B.C. and his successor. The treatment of the old face, with its subtle suggestion of the lines of age, and above all the sympathetic handling of the old and tired eyes, seem to me to recall more than anything else the head of Nsiptah³. The

¹ In the Museo delle Terme: FECHHEIMER, *Plastik der Aegypter*, 59.

² See CAPART, *Chronique d'Égypte*, 81 f.

³ See the illustration in MASPERO, *Art in Egypt* ("Ars Una" Series), Fig. 462, p. 241.



Head in sandstone.
Brit. Mus. No. 37883.

Scale: 1.

ears, too, the fat, rather flabby old ears, are treated in the same way in our head and that of Nsiptah, very differently from the outstanding, jug-handle-like appearance of the usual Twelfth Dynasty ears, though disproportionately large like them (whereas Seventeenth Dynasty ears are usually better proportioned) and as unnaturally placed: a defect in most Egyptian heads, and the only one that we can see in our head. Montemhet's head is more vigorous of course, but in it too we see the same Saïte sophistication, the same more delicate edition of the realism of the Pyramid-period and the Twelfth Dynasty. I have not considered at all the possibility that our head is of the Pyramid-period: that is ruled out at first sight. It has nothing in common with the style of that time except the fact that it is a good portrait. It must be either Twelfth Dynasty or Saïte Theban of 700–650 B.C., and for the reasons stated above I believe it to be of the later age. Montemhet's head has rather more in common with the work of the Old Kingdom, but we see the difference between it and the portraits of that time: it could not belong to any other period than the early Saïte, even did we not know whom it represents.

In regard to details the fact that the ears are unpierced is as good evidence in favour of Saïte as of Twelfth Dynasty date. We know that earrings were worn at the later period, though possibly not as commonly as under the Eighteenth Dynasty: but the piercing is not represented in the statues. Probably only small earrings were worn, not the studs that made great holes in late Eighteenth and the Nineteenth Dynasty ears. The wig is as possibly Saïte as Twelfth Dynasty, though its horizontal waves are often found under the Twelfth Dynasty, and not often under the Twenty-sixth. Amenophis has them under the Eighteenth; but he is obviously wearing his own hair, like Montemhet, whereas our old man and Nsiptah as obviously are wearing wigs. Nsiptah has the typical full Saïte wig without that wave or line, either horizontal or vertical, that is usual under the Eighteenth Dynasty when the elaborate curled wig is not shown. Amenophis's hair is parted in the middle and combed down on either side like that of the extraordinarily naturalistic late Eighteenth Dynasty head of a young man at Florence (in Fräulein FECHHEIMER's *Plastik der Aegypter*, Fig. 63, miscalled a woman¹), but this young man's hair covers his ears, while that of Amenophis is put back behind them in a rather old-fashioned way, revived in the Saïte wigs; the usual Eighteenth Dynasty wig covered the upper half of the ear, as Montemhet's hair does. But his hair is cut in a very unusual and individual style of his own, showing his baldness in front and turning up behind in a way reminding us of the celebrated short coiffure of the Marquis of Granby in the eighteenth century, which was considered extremely eccentric in that long-haired and bewigged age. Our old man's wig might perhaps be decisive for a Twelfth Dynasty date did not the other characteristics of his head, notably the treatment of the ears and eyes, the delicate suggestion of old age, the subtle suggestion of a smile, more subtle than anything the Twelfth Dynasty can show, decisively incline us to attribute it to the Saïte-Theban period.

We have no other criteria to guide us: the stone, a white quartzite sandstone, is very probable under the Twelfth Dynasty, when quartzite sandstone was much in favour. But it is equally possible under the Eighteenth or Twenty-fifth—Twenty-sixth Dynasties.

The height of the head is 9 inches (22.7 cm.).

¹ The face to me is distinctly that of a young man, not a woman; and women did not wear their hair in this way without any confining band when no wig was placed over it. Amenophis's head is enough to show that men under the Eighteenth Dynasty often did wear their own hair parted in the middle in this way, and we find the same coiffure in the sketch of the painter Huy (*Zeitschr. f. äg. Spr.*, XLII, 130, reproduced in *Journal*, I, 202).

A MARRIAGE SETTLEMENT OF THE TWENTIETH DYNASTY

AN UNPUBLISHED DOCUMENT FROM TURIN¹

By J. ČERNÝ AND T. ERIC PEET

With Plates xiii—xv.

Among the hieratic papyri in the Turin Museum is one which stands out from the rest by reason of its contents, which are of a legal nature. The papyrus itself, or rather the main portion of it, is numbered 2021 in the Museum Catalogue, and also bears a number 271. This main piece measures 23 cm. in height by 67 cm. in length, and there are in addition five fragments, four of which join, whose exact position relative to the main portion cannot be determined.

The papyrus has a curious light colour and a soft powdery surface. It was already far from new when our text was inscribed on its recto, for in some places the upper layer of fibres had already perished and here the writing lies on the exposed back of the lower layer. The verso, *i.e.*, the face on which the vertical fibres lie uppermost, bears two lines (Pl. xv, bottom) in a large rough script typical of the end of the Twentieth Dynasty, running as follows: "The army commander and chief² of the troops of Pharaoh Pionkh to the troop-captain Peseges of the troops of Pharaoh, saying, When my letter reaches." Here the text breaks off. The persons mentioned are historical, or at least one of them is, for Pionkh the commander in chief is the son of Herihor, and is already known to us from several letters³. These two lines do not form the address of a letter, which would not have contained the words "When my letter reaches," nor can they well be the beginning of a letter, for this would surely have been placed nearer the top of the page and would probably have been completed. They were perhaps written to try a pen.

Accepting the usual criterion that the recto of a papyrus is always filled before the verso we may take the period of Pionkh, *i.e.*, the beginning of the Twenty-first Dynasty, as a *terminus ad quem* for the legal document on the recto. We can, however, be more precise than this, for several persons are mentioned in it who are well known to us from papyri dating either from the reign of Ramesses IX, Neferkerē⁴, or from the "Renewal of Births," which seems either to have succeeded that reign or to have been a name for the later part of it, from the 19th year onward, or yet again from the succeeding reigns of Ramesses X, Khepermarē⁴ and Ramesses XI, Menmarē⁴. Thus one of the witnesses, the scribe Dhoutmose of the Necropolis, occurs in SPIEGELBERG, *Thebanische Graffiti*, Indexes, 151, no. 425, and 151-2, no. 426 (these two persons are shown to be identical by an unpublished graffito copied by Černý). Add Pap. Turin, P.R. 91, 1. 14, P.R.

¹ We are indebted to Professor E. Schiaparelli for his kind permission to publish the papyrus.

² For this title *cf.* Pap. Turin P.R. 65 c. 5 and MASPERO, *Momies royales*, 678.

³ SPIEGELBERG, *Correspondances du temps des rois-prêtres*, 13-19. ERMAN, *Ein Fall abgekürzter Justiz in Ägypten* (Abhandl. der Kgl. Akad. d. Wiss., Phil.-Hist. Klasse, 1913, Nr. 1). GARDINER, *A Political Crime in Ancient Egypt*, in *Journ. Manchester Eg. and Or. Soc.*, 1912-13, 57 ff.

⁴ P.R. have obscured the name in their facsimile by tracing as it lies an inverted fragment.

100+155-7 *passim* (part of P.R. 65 c), P.R. 61, 1. 17 and unpublished continuation of this, both mentioning the vizier Wennufer¹ (all collated). This may well be the same man who appears as scribe of the Necropolis in Pap. B.M. 10052, 5. 14, 8. 11 and 10. 14, a document dated in Year 1 of the Renewal of Births.

The *wꜥb*-priest and chief workman Howtenufer, son of Amenkhau, is possibly identical with the workman of the same name and parentage who appears in Pap. Mayer A, 2. 13, and without filiation 2. 13, 6. 2, and 6. 7, also Pap. B.M. 10403, 1. 3, where he is described as a workman of the temple of Ramesses III: the first of these two papyri is dated in Years 1 and 2 of the Renewal of Births and the second in Year 2 of the same epoch. Pap. B.M. 10068, in its list of houses on the West of Thebes, mentions three Howtenufers, a priest (*wꜥb*), a workman and a chief workman, vs. 2. 5. 5. 7 and 7. 3, one of whom may possibly be that of our document: the papyrus is dated in Year 12 of an unknown king, but its mention of the houses of Prince Pwercō, the scribe of the army Kāshuti and the scribe of the quarter Wennufer dates it to the end of the Twentieth Dynasty.

The priest Nebnufer cannot with certainty be identified from any other document. A priest of this name occurs in a much damaged context in Pap. B.M. 10053, vs. 2. 6, but the name of his father, which must have occurred in the previous line, is lost. This page of the papyrus is dated in Year 9, but of whose reign is quite uncertain.

The name Amenkhau is so common at this period that the occurrence of a prophet of that name in another papyrus is hardly to be used as a basis for any conclusion. Let it suffice therefore to state that we have a *it-ntr* Amenkhau in Pap. Ambras (Vienna, no. 30), 1. 5, and two in the B.M. list of houses mentioned above, vs. 3. 27 and 4. 28.

The chief workman Bekenmut is doubtless identical with the man quoted in SPIEGELBERG, *Thebanische Graffiti*, 110, no. 118.

The scribe of the quarter Nesamenope might conceivably be the same as the scribe of that name mentioned in Pap. Turin, P.R. 100. 10, 155. 6 and 156. 4: there is also a scribe Nesamenope of the Necropolis in Pap. B.M. 10052, 1. 19, 5. 17 and 5. 21, also B.M. 10403, 1. 2 and 3. 16.

This evidence, or at least such of it as is completely cogent, makes it clear that our document is to be dated to the obscure last years of the Twentieth Dynasty.

The legal text on the recto is written in a moderately large and not unattractive hand, remarkably free from the extravagant ligatures and cursive strokes of the usual legal and business hands of this period, except in the list of witnesses. The main piece contains two complete pages of text, the second of which clearly forms the conclusion of the document. These two pages we shall call 3 and 4. On the right-hand edge of the main piece are the ends of the 12 lines of a preceding page, page 2, and considerations of sense and grammar show at once that the beginnings of the last six of these lines are on the combined fragments 3 and 4, but between the beginnings and the ends there is a sadly long gap. See Pl. xiii.

Fragments 1 and 2 are both from the top of the sheet, as the space above their first lines shows. In line 1 of fragment 2 the sign $\dot{\text{h}}$ is followed by a blank space of nearly 10 mm. in width, reaching to the torn edge, and in view of this we at first regarded it as the end of a line, despite the fact that it does not complete a word, and took the fragment to be the last relic of a lost preceding page. At the last moment, however, Dr. Botti found a small fragment (fragment 5) which joins it on the right. This new fragment has down its right side a blank margin, and clearly contains the beginnings of

¹ For this vizier see *Journal*, XII, 259. The difficulty there propounded is probably to be solved by assigning P.R. 61 to the reign of Menmarē.

lines. Consequently the space after the ¶ in line 1 of fragment 2 must have been left blank owing to a defect of the papyrus at that spot.

Fragments 5 and 2 then contain the beginnings of the top lines of a page. What is more, it seems highly probable that the combined fragments 3 and 4 join the combined 5 and 2 just below line 6. The join cannot actually be tested, for the papyrus is mounted under glass and the two pieces are separated, but the edges appear to correspond, and the combination would bring the beginnings of the lines on 3 and 4 correctly under those on 5. This join may therefore be regarded as practically certain¹ and it has been made in the plate. The combined 2, 3, 4 and 5 thus give the beginning of a page the end of which is on the right-hand edge of the main papyrus. We have called this page 2, since it is clear from its first words that at least one page has been lost in front of it.

There remains fragment 1, which probably comes from the middle portion of page 2. The position given to it in the plate is conjectural, and is based purely on the proposed restorations in ll. 6 and 7, see p. 34, note 5.

TRANSLATION.

Page 2, line 1. *The god rejected.....concerning her.....all that I acquired*¹
(2) *with her.....for the citizeness.....in front of the Vizier.* (3) *I brought in*² *four*
slaves.....I am satisfied (?).....what has been done (4) *...went.....I gave her the female*
slave Nu.....together with (5) *.....I will give her up (?)*³ *.....[Sed]emamen[pa]ash (?)*⁴
(6) *.....two slaves who were in my possession as [my] share*⁵ *along with her,* (7) *for*⁶
*she was a child.....the children of Ta[thari]*⁵ *who were in my* (8) *house, though.....did*
not.....in front of the Vizier (9) *and the officials of the Court.....children [in]*⁷
(10) *this manner.....this* (11) *day, for [Pharaoh (?) has] said*⁸ *.....“all that he*
acquires (12) *along with her”.....consisting of* (Page 3, l. 1) *the two male*⁹ *slaves and the*
two female slaves, total four, with children; the (sic)¹⁰ *two thirds in addition to her one*
*eighth*¹¹, *and I* (2) *gave these nine slaves*¹² *which had fallen to my lot*¹³ *in my two thirds*
along with the citizeness Tathari to my (3) *children along with the house of their*¹⁴ *mother’s*
*father also. They are not [ignorant?]*¹⁵ *of anything that <I> brought in*¹⁶ *with their mother.*
(4) *And I would*¹⁷ *have given them some of what I am bringing in with the citizeness*
Anoksunozem, but Pharaoh has said, Let (5) *every woman’s dowry* (??)¹⁸ *be given to her.*
Said the vizier to the priest and chief workman Howtenufer and the priest Nebnufer, the
children (6) *of the prophet Amenkhau who stood before him, (being) the eldest brothers of his*
*children*¹⁹, *“What say ye of the statement which the prophet* (7) *Amenkhau your father has*
*made? Is*²⁰ *it true about the nine slaves which he says he gave to you as his two thirds which*
he divided with (8) *your mother, together with the house of <your> mother’s father?” They*
said with one accord, “Our father is correct; they are in our possession in truth (??)²¹.*” The*
vizier said (9) *[“What think ye of”]*²² *this arrangement which your father is making for the*
citizeness Anoksunozem, this wife of his?” (10) *They said. “[We have heard?]*²³ *what our*
*father is doing, and as for what he is doing, who shall question it?*²⁴ *His property is his*
*own, (11) let him give it [to whom] he [will]*²⁵.*” Said the vizier “Even if it had not been*
*his wife but*²⁶ *a Syrian or a Nubian whom*²⁷ *he loved and to whom he gave* (12) *property of*
*his [who]*²⁸ *should make void what he did? Let the four slaves which [fall to his lot] with*
*the citizeness Anoksunozem be given [to her?]*²⁹ (13) *together with [all that he may acquire]*³⁰
*with her, which he has said he would give her, ‘my two thirds*³¹ *[in addition to]*³² *her one*
eighth, and no son or daughter of mine shall (Page 4, l. 1) *question this arrangement which*

¹ The matter is indeed clinched by the sequence of words [ρ?] ἰργ-ἰ nb ἰrm-s in line 1 (end) and line 2 (beginning).

tr

1

2

3

4

5

6

7

8

9

10

11

12

frg. 1

Page 2

frg. 2

frg. 5

1

2

3

4

5

6

7

8

9

10

11

12

join?

frg. 3 & 4

① Or ~ — ② Or l. — ③ Or m. — ④ Perhaps for — ⑤ Or m. — ⑥ Suits traces. — ⑦ Probable. —

⑧ Traces suit n³.

[I]³³ have made for her this day.” Said the vizier, “Let it be done³⁴ in accordance with what the prophet Amenkhau, this prophet who stands before me, has said.” (2) The vizier gave instructions to the priest and scribe of accounts Ptahemhab of the Court of the temple of Usimarē^c Miamūn saying, Let this arrangement which I have made stand recorded (3) on a roll in the temple of Usimarē^c Miamūn. The like was done³⁵ for the Great Court of Nō. In the presence of many witnesses. List thereof:








Right-hand column.

- (4) Chief guard and scribe of the prison Dhoutemhab of the army.
- (5) Chief guard Hori, son of Dhoutnakht, of the army.
- (6) Deputy Neskhnons of the army.
- (7) Overseer of the stable Mensenu of Kheni...³⁶.
- (8) Groom Bekenese of [the temple].
- (9) The scribe Dhoutmose of the necropolis.
- (10) The scribe Efenkhons of the necropolis.
- (11) The chief workman Bekenmut of [the necropolis].
- (12) The lector-priests of the temple.
- (13) The prince Nesamenōpe.
- (14) The scribe of the quarter Nesamenōpe.

Left-hand column.

- (15) The chiefs of Mazoi of the necropolis.
- (16) The controller Amenkhau of the West of Nō.
- (17) The controller Pekhal of the West of Nō.
- (18) The controller Pnekhtōpe.
- (19) The controller Amenhotpe.
- (20) The controller Amenōpenakht.
- (21) The controller Ankhtuemdiamūn.

NOTES ON THE TEXT.

1. The form *iry-i* may just possibly be a survival of the Prospective Relative Form in legal Late Egyptian. It probably has prospective meaning here “all that I might acquire,” and almost certainly in 2. 11, where it forms part of a statement of a law “all that he may acquire along with her.” It seems to correspond exactly to the *shpr nb ntī iw-i r irt-w irm-s*, “all profits which I may make with her,” of the later hieratic contracts (see MÖLLER, *Zwei ägyptische Eheverträge aus vorsaitischer Zeit*, 12, text c, 7/8 and text d, 6/7) and the *n3 ntī iw-i r dīt hpr-w* of demotic (e.g., GRIFFITH, *Rylands Papyri*, Pap. xx, l. 4). In 3. 10 the form might again be prospective in meaning “what our father is going to do,” but in view of the form  used by the vizier in the previous line, which cannot, from its form, be Prospective, it seems more natural to take them as the ordinary L.E. Relative, the form  without prosthetic aleph being used when the definite article preceded. The same explanation may also apply to the forms of 2. 1 and 2. 11. For this form without an  and with the  written out compare Pap. Mayer A, 1. 18,  (preceded by the definite article) and Pap. B.M. 10052, 16. 11, *p3 shr*  (past tense in both cases). The occurrence of the  in the 2nd Plural in Pap. Abbott, 5. 15–16, may have another explanation, see SETHE, *Verbum*, § 794, p. 344.

2. See note 16 below.

3. What can *dwn*, “to stretch,” mean here? Read *r wn-s*, “I will forego her”?

4. “Amūn hears the call” or similar name of a slave? A pure guess.

5. It is very tempting to restore simply 𐤀𐤁𐤃𐤅 in the lacuna, thus bringing Frag. 1 within about three groups of the edge of the main piece of papyrus. This spacing would also suit the very plausible restoration 𐤀𐤁𐤃𐤅 in the next line.

6. Reading *hr* before *nti*.

7. Restoring *m*.

8. The third person singular in *iryf* at the end of the line shows that we have here some sort of legal dictum quoted by the speaker, as in 3. 4-5. Note that in both cases it is introduced by the particle *hr*.

9. For *ḥwty*, "male," cf. Ostr. B.M. 5624, vs. 4 (*Journal*, XII, 177) and *Wörterbuch*, 217.

10. $p\dot{3} \frac{2}{3}$, "the two-thirds," i.e., "my two-thirds"; cf. 3. 13. Perhaps $p\dot{3}i\dot{3}$ should be read.

11. It is unfortunate that the fragmentary state of the previous page makes it quite uncertain whether 3. 1 relates to Anoksunozem or to Tathari. It is tempting in the light of 3. 12-13, where 4 slaves are settled upon Anoksunozem and a division made with her on a basis of two-thirds and one-eighth, to refer 3. 1 to her. But it must not be forgotten that the 4 slaves plus children may just be identical with the 9 given to Tathari, and, what is more, a division on this same basis of two-thirds and one-eighth may have been made with both wives, the proportions being perhaps fixed by law.

12. These may be the 4 mentioned above plus (five) children. See note 11 above.

13. *hṣi*, "to fall to the lot of." Cf. Pap. B.M. 10052, 6. 5, and MASPERO, *Momies royales*, 705, line 16 of the text (= *Zeitschr. f. äg. Spr.*, 1883, 73), in both cases with preposition *r*. Mayer B, 11, 13 and 14, with *m* (reading uncertain). The use with *r* must be distinguished from another with the meaning illustrated by *Bulletin Museum of Fine Arts Boston*, XII, 15, fig. 10, *rht dbwt hṣ r*, "the number of bricks contained in....." Cf. probably Pap. Harris, 21 b. 11, where *hṣ rf* may be a technical term for "content."

14. *mdīw*. Probably an anticipation of the demotic use of *mdī* to indicate the possessive case; SPIEGELBERG, *Demotische Grammatik*, § 376. For a good hieratic example cf. Ostrakon Petrie 92, vs. 5 (unpubl.), *twi whm mdt mdīf ḥn*, "I repeat his speech." It is hardly possible to translate our passage "and the house of (their) mother's father is in their possession," though the simple "house of mother's father" is found in 3. 8 below, for *hnḥ* cannot join two sentences unless the second begins with an infinitive.

15. Restore perhaps *bn st hr hm(t)*, "They are not ignorant of all that I acquired with their mother," and they are thus competent to tell whether it has all been handed over to them or not. To restore a pseudoparticiple with the meaning "They have not been deprived of," which would make excellent sense, is difficult in the lack of a preposition such as *m* after it.

16. Here probably to "bring in" as one's share in the common property of the married *ménage* rather than "to acquire," which in this papyrus is rendered by *irt* (2. 1, 2. 11). See above, note 1.

For *inī*, "to acquire by purchase," cf. Pap. Turin P.R. 10, 6. 10, Ostr. B.M. 5649, 1, Pap. Vienna 30. 1. 4, etc., Rhind Math. Pap., No. 62, Pap. Berlin 9784, 22.

Unless the scribe has omitted a 𐤀 (*in-i*, Rel. Form) we must translate as a Passive Participle "what was brought in," a clumsy expression.

17. A very difficult sentence. At the beginning of 1. 4 the top half of a vertical sign is still visible. Either *ir* or *bu* would suit the traces, but, as the latter is grammatically impossible before *wn*, *ir* may be regarded as certain. Now *wn ir-i dī* might quite well stand in the apodosis of an unfulfilled conditional sentence, e.g., Wenamon 2. 29, B.M.

bound to be future, *nm* being a compound of the particle *in* with *mi*, "who." See GUNN, *Studies in Egyptian Syntax*, 46. But why do we here have *nm irr-f* while in l. 10 above we find *irr nm*?

29. Restore *imi ns p3 4 bk i-h'i rf. immi di-tw ns* is what we should expect, but there is no room for it and the simpler *imi ns* is by no means uncommon. Cf. l. 3 above, Pap. Mayer A, 10. 23, Ostr. B.M. 5625, vs. 3, Ostr. Univ. Coll. 4 (=Anc. Egypt, 1914, 107).

30. Restore *hn^c p3 iry-f nb irm-s. (iry-f, Relative form. See above, note 1.)*

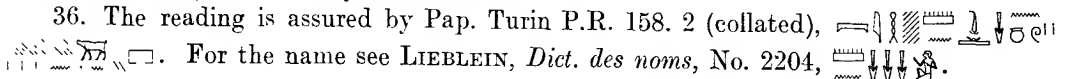
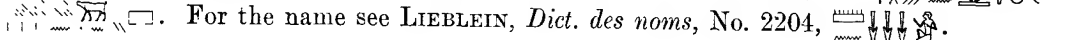
31. Note the omission (quite correctly) of the resumptive pronoun *šw* ("it") after the Relative Form *i-dd-f. p3i-i 2/3 hr p3i-s 1/8* is thus a subordinate nominal clause. If we took it as object to *dūt* we should need a resumptive pronoun *rf*, "concerning which he said he would give her his $\frac{2}{3}$ in addition to her $\frac{1}{8}$."

32. Restore *hr p3i-s 1/8*.

33. Restore *š*.

34. Or, since the Vizier has just given his decision in the previous sentence, should we render "Let a copy be made of what A. has said"?

35. Hardly a continuation of the vizier's instructions "and let the like be done," which would require the Conjunctive *mtw-tw*.

36. The reading is assured by Pap. Turin P.R. 158. 2 (collated), . For the name see LIEBLEIN, *Dict. des noms*, No. 2204, .

The circumstances of the case appear to be as follows. A certain prophet called Amenkhau had been twice married, first to a lady called Tathari, who is dead, and secondly to a certain Anoksunozem. By Tathari he had children, here represented by the two eldest of the brothers (3. 5). We hear of no children by Anoksunozem. By virtue of his marriage with Tathari Amenkhau had "divided with her" (3. 7) two-thirds of some property, consisting of, or at least including, nine slaves. These nine slaves he has, in accordance with Egyptian law, passed on, on his second marriage, to his children by Tathari, along with the house of this lady's father.

For his second wife, Anoksunozem, Amenkhau proposes an arrangement or settlement (*šhr*), by which she is to have four slaves who formed part or the whole of his "two-thirds added to her one-eighth." The one-eighth must have been his wife's share in some property of her own family, and the two-thirds settled on her by Amenkhau was clearly private property of his own, quite independent of the common fund of himself and his first wife, as is admitted by the children.

But what is the bearing of the document? With more than half of it lost it is not easy to divine. The first surviving page, page 2, seems to consist entirely of a monologue by Amenkhau giving a description of certain arrangements made for his two wives, dealing chiefly with the disposition of various slaves. This monologue appears to be interrupted in 2. 11 by a verb in the 3rd person, *iri-f*, but this is only apparent, for the words *hr dī* earlier in the line introduce the quotation of some dictum or judgment given by the vizier or the Pharaoh, as is clear from the use of a similar phrase in 3. 4. It is unfortunate that we cannot see the bearing of the reference to "the god" in the first line (2. 1). Does it relate to the rejection of an appeal made to an oracle?

The long statement of Amenkhau continues down to 3. 5. The vizier then asks two questions of the two elder children of Amenkhau by his first wife Tathari, who are present on behalf of themselves and their younger brothers and sisters. The first question

is whether they admit the truth of Amenkhau's statement, more particularly his assertion that they had received the nine slaves which formed part of the property of the first marriage. To this the children agree. The second question is what they think of the settlement he is proposing to make on his second wife Anoksunozem, their stepmother. They take no exception to the arrangement, admitting that the property of which he is disposing is his own.

Thus the papyrus does not record a dispute of any kind, but simply the making by Amenkhau of a marriage settlement on his second wife Anoksunozem. In order to make this legal it was done in front of the vizier, and representatives of the children of his first wife were present in order to testify to the fact that the goods of which their father was disposing were no part of the common property of the first marriage, which had passed, as it should, to the children.

The four slaves which Amenkhau "gives" to Anoksunozem may in this case be of the nature of the *špe n s-hmt* (Coptic *ⲩⲁⲛ*) of the later marriage contracts (MÖLLER, *Zwei Eheverträge*, 24-6), a contribution made by the husband to the wife at the time of the marriage, but which does not become her undivided property except in the case of his dying or divorcing her.

If this explanation be correct it must be noted that our document is not the actual marriage contract but the record of proceedings before the vizier preliminary to the making of such a contract. Whether such preliminaries were necessary in all cases or whether they were required only in the case of a second marriage, where the rights of the children by the first wife must be satisfied before any settlement could be made on the second, we have no means of telling.

It is not clear from what remains to us whether the declaration was made before a court (*knbt*) presided over by the vizier, or simply before the vizier himself; we do not even know whether the vizier when he dealt with cases of this kind was always accompanied by a court (*nʿ srw*). In the fragmentary page 2 Amenkhau seems twice previously to have appeared before the vizier in connexion with his marriage settlements; on the first occasion the phrase used is simply *m bʿh ʿt* (2. 2), while on the second occasion we have *m bʿh ʿt nʿ srw n tʿ knbt* (2. 8-9). The list of witnesses with which the papyrus closes might lead us to think that we are dealing here not with a fully constituted court of officials, where witnesses would hardly have been necessary, the court itself performing that function, but with a simple declaration in front of the vizier.

Two institutions, however, seem to be interested in the proceedings. The vizier's decision is to stand recorded on a roll in the temple of Ramesses III, in which Amenkhau doubtless served as a priest, and the person made responsible for making this entry is the "priest and scribe of accounts Ptahemhab of the *knbt* of the temple." This title need not imply the existence of a court in the legal sense of the term connected with the temple, for *knbt* may here be used, just as in the Hapzefa contracts, for the staff of the temple or a certain portion of it¹. "The like was done" (*ʿwtw ʿrt m mitt*), i.e., a similar record was made, for the Great Court of Nō, and it would seem probable from this that this court kept in its archives copies of all deeds relating to property in the Theban area. If, as is





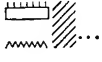


¹ Siut, Tomb I, 283-9, where a list of the officials composing the *knbt* is given. These seem to be the permanent and senior officers as distinct from the *nwt*, who only served a month at a time. Since, however, the temple of Ramesses III was, in the late Twentieth Dynasty, the seat of the necropolis administration, the permanent staff of the temple may well have constituted *de facto* if not *de jure* a court of justice for persons employed both in the cemetery and in the temple itself.

likely, our document was found at Medīnat Habu with the great mass of cemetery papyri now at Turin, it must be the copy made for the temple.

It is most unfortunate that the earlier pages have perished. These, judging by their remains, would have told us what the two portions of two-thirds were, which Amenkhau received with his two wives respectively, and of what unit was the one-eighth brought in by Anoksunozem¹. It is unfortunate, too, that the sentence contained in 3. 4–5 should be so difficult of translation. Did it contain a statement of a general law in Egypt or of a special enactment of the reigning king (*Pr-ḳ* is normally² used only of the living Pharaoh)?

Through the kindness of Dr. Alan Gardiner we are able to publish here an ostrakon, No. 55 of his collection, which, though its exact meaning is uncertain, seems to deal with a case somewhat similar to that of our papyrus.

The recto bore a list of objects of which very little is now readable.

1. ...
2.  1.
3. Lost.
4. Lost.
5. ...
6. Lost.
7. ...
8. Lost.
9. Lost.
10. ...
11.  1. 'Wood, footstool, 1.'
12. . 'Doors, 5.'


This is clearly the specification of the things (*ḥnw*) mentioned in l. 1 of the verso. Owing to the obscurity of the text on the verso it is far from certain that this list is a specification of the bridal possessions similar to those usual in the later contracts (*Rylands*, xvi, etc. See GRIFFITH, III, 135–6).

The text of the verso is as follows:

1. 
2. 

¹ And perhaps by Tathari also. See p. 34, n. 11.

² See, however, the interesting passage Pap. Bulaq 10, ro. ll. 9–10 (collated).

³ Gardiner marks a small vertical trace as visible at the bottom, perhaps the remains of .

MAKING A MUMMY

By WARREN R. DAWSON

With Plates xvi-xviii.

A prolonged study of the literature of mummification has convinced me that most of the accounts we possess of the technique of Egyptian embalming abound in errors and omissions. In the course of this enquiry I have read and annotated scores of accounts by various writers between the time of Herodotus and the present day, but many of them describe processes that it would be impossible to put into operation, and the examination of a large series of actual mummies of various periods has revealed to me many details which the writers do not take into account at all. With the exception of the works of Professor Elliot Smith, to whom we are indebted for almost all our scientific knowledge of mummification and its significance, and of Professor Wood Jones, the majority of the accounts of mummification even by modern writers are of little value. In a recently published handbook of Egyptian funereal archaeology the same old errors and generalizations which appear again and again in the works of earlier writers are presented to the reader once more. I shall therefore attempt to describe in outline all the manipulations to which the body of an Egyptian was subjected between the day of his death and that of his funeral. In spite of the foregoing strictures on the accounts of the older writers I hasten to say that there are certain notable exceptions. The observations of Rouyer, Granville and Pettigrew (to name but three), considering their materials and the state of knowledge of Egyptian archaeology which existed in their day, are contributions of the highest value, and embody much original research.

This account is based mainly upon the technique of the New Kingdom, and I have generalized as far as possible in describing procedure which varied in certain details from time to time, and almost from reign to reign. Full particulars of these details will be found in Elliot Smith's descriptions of the royal mummies at Cairo and in various other monographs he has written. He has, in the main, described the mummies themselves, that is to say the *results* of the various manipulations of the embalmers: I have endeavoured to reconstruct in consecutive order the various processes employed to obtain those results. I have chosen the above specified period because we have insufficient material to deal at all fully with the earlier periods, and because in the Twenty-first Dynasty a new and distinctive technique was introduced, a description of which would not only require too much space but is moreover needless, since Elliot Smith, who first discovered this peculiar technique, has already worked the subject out in the fullest possible manner¹. I shall, however, note the principal variations in method revealed by the earlier and later mummies respectively in their appropriate places.

The whole process of mummification, it is almost superfluous to say, was one of profound religious significance, and the embalmers and their assistants impersonated the gods who figured in the mythological embalming of Osiris. The embalmer's chamber was

¹ *Contribution to the Study of Mummification in Egypt*. (Mémoires présentés à l'Institut Égyptien, tome v, fasc. 1, Cairo, 1906.)

consequently not a mere workshop, but in a sense a kind of shrine in which certain prescribed rites were performed. From the general statements made in various Egyptological books we have become accustomed to think of the embalmer's workshop as a permanent establishment, like a mortuary or an anatomical theatre, to which bodies were taken for treatment. This notion has arisen from the use of such expressions as "the embalmer's laboratory," "the embalmer's studio" and the like. There is no evidence, however, that any such permanent establishment existed, but there is evidence which seems to leave no doubt that the workshop was a temporary structure or tent, erected for each person as occasion arose, and that, having fulfilled its purpose, it was dismantled. Possibly for such communal burials as those of the priesthood of Amūn in the Twenty-first and Twenty-second Dynasties a more or less permanent place of embalming was maintained, but for nobles and private individuals it would seem that each had his own booth or kiosk erected. Certain texts speak specifically of "thy place of embalming," or "his place of embalming," which again implies that each person had his own¹. The usual Egyptian word for the embalming place is *w'bt*, "pure place," or *w'bt nt pr nfr*, "pure place of the Good House." It was probably erected near the tomb of the deceased, but in any case it was in the necropolis, far removed from the habitations of the living, for on the death of a person his body was conveyed to the embalmer's shed, probably with appropriate ceremony. In the tomb of Pepionkh at Mē there is a scene labelled "escorting to the workshop of the embalmer²." The word *w'bt* occurs in texts of all periods from the Old Kingdom to Roman times.

Another phrase of frequent occurrence is *syh ntr*, "tent of the god," or "god's booth." The temporary nature of the embalmer's workshop is again indicated by this word.

In the tent or kiosk of the embalmer the whole process of mummification was carried out, and it occupied a period of seventy days³. The actual manipulative processes could have been completed in a much shorter time, but it must be remembered that the whole ceremony was a religious one, and was carried out in conformity with a definite ritual, one or more priests being present during a great part of the time reciting formulae as each manipulation was completed, and the period was consequently much protracted. We have references to this canon or ritual in the inscription of Anemher, where the expression "according to that which comes in writing" follows each ceremony or process enumerated⁴. In addition to this we have the remains of the ritual which was used during the lengthy process of anointing and bandaging the mummy⁵, and finally, in various pictures in certain tombs at Thebes, to be mentioned later, an officiating priest armed with a papyrus-roll is seen superintending the manipulations of the embalmers.

On its arrival at the workshop, the body was first stripped, then laid upon a board or platform. One of these boards has actually been found: it is a wooden platform 7 ft. 1 in. long, and 4 ft. 2½ in. wide, and is provided with transverse battens, and was probably supported upon two blocks or trestles⁶. A wicker-work bier which had served the

¹ GARDINER, *The Tomb of Amenemhēt*, 56.

² GARDINER, *op. cit.*, 45, n. 4.

³ To the instances relating to the seventy-day period collected in ELLIOT SMITH & DAWSON, *Egyptian Mummies*, 53 ff., must be added *Papyrus Rylands LX*, p. 10, l. 10.

⁴ BRUGSCH, *Thesaurus*, 893: GRIFFITH, *High Priests of Memphis*, 29: ELLIOT SMITH & DAWSON, *op. cit.*, 54.

⁵ The so-called "Ritual of Embalming," published by MASPERO, *Mémoire sur quelques papyrus du Louvre*, Paris, 1875.

⁶ WINLOCK, *Bulletin of the Metrop. Mus. New York*, Part II, Dec. 1922, 34.

same purpose was discovered in similar circumstances two years later¹. In the conventional representation of embalming a mummy, which is an extremely common decorative device on coffins, and is also represented in the vignette to Chapter 151 of the Book of the Dead, the mummy is shown lying upon a lion-headed bier attended by the embalmer, who impersonated the god Anubis, and wears a jackal-headed mask². Probably this ornate lion-couch was not really used until the process of actual embalming was nearly finished, and the mummy merely awaited the final ceremonies. The kings had three such couches, one with a cow's, the second with a lion's and the third with a hippopotamus' head, as we know from the pictures in the tomb of Seti I, the fragments found in the tomb of Haremhab, and the complete specimens in the tomb of Tutankhamun³. These luxurious biers were almost certainly not used until the "dirty work" of evisceration and anointing had been completed.

The first process to be performed was the extraction of the brain. I have elsewhere described this feat in detail⁴, and need make no further reference to it than to point out that a passage was forced with a chisel through the nostril (usually the left) and the ethmoid bone into the cranial cavity. This was the normal procedure, but sometimes the operator missed the ethmoid, and broke through the sphenoid. Considerable force was used to effect this fracture, which often did much damage to the facial skeleton. A metal rod, hooked at the end, was then inserted, and the membranes and tissues of the brain were lacerated and reduced to fragments by this means. The broken brain was then removed piecemeal by means of another rod, the end of which was spirally twisted so as to form a kind of spatula⁵. In many cases every particle of brain has been so completely removed, that it is evident that the cranial-cavity had been irrigated with a corrosive fluid in order to wash it out. It often happens however that the operation was less carefully performed and fragments of the brain were left behind. There were other methods of removing the brain which did not involve a forced passage through the nose, and these I have described in the memoir referred to. For the moment the cranial cavity received no further treatment. The mouth was washed out, and then stuffed with resin-soaked linen, and sometimes also the ears. The face was then thickly coated with resinous paste. The eyes, which were not ablated, collapsed into the orbits, and pads of linen were placed over them and the lids drawn over this packing material. In the Twenty-first and Twenty-second Dynasties artificial eyes of obsidian or some other suitable material were placed over the shrunken eyeballs, and the lids adjusted, but not closed.

The next process was the removal of the viscera. Herodotus tells us that an incision was made in the flank (Diodorus specifically says the *left* flank) through which the entrails were removed and washed. The examination of scores of mummies of all periods from the Fourth Dynasty onwards proves the truth of these assertions, for the embalming-wound is found almost always on the left side. I know of only two recorded cases in which the right flank has been incised⁶. The embalmer inserted his hand through the

¹ WINLOCK, *op. cit.*, 1924, Part II, 32.

² Anubis was *par excellence* the god of embalming. A frequent title of this god is "Chief of the god's tent." An actual mask in the shape of a jackal's head which was used by the embalmer has been found, and is figured in LEXA, *La magie dans l'Égypte antique*, Paris, 1925, Pl. xxxiii.

³ ELLIOT SMITH, *Tutankhamen and the Discovery of his Tomb*, 109.

⁴ *Proc. Roy. Soc. Medicine*, XX, Part VI.

⁵ For the implements used in mummification see K. SUDHOFF, *Ägyptische Mumienmacher-Instrumente*, in *Archiv für Gesch. der Medizin*, V (1912), 161-171 and 2 plates.

⁶ WOOD-JONES, *Arch. Surv. Nubia*, Report for 1907-8, II (*Report on the Human Remains*), Cairo, 1910, 206; BUDGE, *Prefatory Remarks on Egyptian Mummies....The Mummy of Bak-ran*, London, 1890, 25.

incision, and with a knife severed all the organs from their connexions. The abdominal viscera were first removed, then an incision was made in the diaphragm, and through this opening and the original flank-incision, the operator inserted his arm and removed the thoracic viscera, except the heart, which was always carefully left *in situ* attached to its great vessels. Diodorus tells us that the kidneys also were left in the body, and in some instances they have actually been so found, but the rule was not invariable as it was in the case of the heart. Except when through clumsy or careless manipulation the heart was accidentally severed (in which case it was left either lying loose in the thorax or else attached by a ligament) it is always to be found in its place. This fact has great significance when considered in relation to certain Egyptian texts, but the subject is one into which we cannot enter now. Elliot Smith demonstrated this fact years ago, but still the time-honoured fallacy is repeated, that the heart was taken from the body and placed with the other viscera in a Canopic jar¹.

The exact situation of the embalming-wound varied from time to time and its position, taken in conjunction with various other details of technique, is a valuable indication of date. In the early part of the Eighteenth Dynasty, the embalming-wound was a vertical incision, extending upward from near the anterior superior spine of the ilium towards the ribs. Later in the same dynasty, in the time of Tuthmosis III, a change was made, and the incision was cut downwards from the same point, taking an oblique course parallel to Poupart's ligament. Later on the vertical position was resumed². Herodotus states that the body-cavity was next washed and filled with myrrh and other preservative agents, then sewn up, and soaked in natron for seventy days. His account is here at fault in several particulars. In the first place, it would have been wasted labour and entirely ineffectual to have filled the cavity with spices *before* its long immersion: in the second place, the custom of sewing up the wound, whilst not unknown, is so extremely rare as to be the exception and not the rule: in the third place, seventy days was the period occupied by the entire process of mummification, not merely the salting-process alone, which we know from various Egyptian texts to have occupied only part of that time. The actual procedure after removal of the viscera was merely to wash out the body-cavity, and then to immerse the corpse in the salt-bath. During this long immersion the epidermis peeled off, taking with it all the body-hair, and it was for this reason also that special care was taken to secure the nails so that they should not come away with the macerated skin and be lost. To accomplish this end, the embalmers cut the skin round the base of the nail of each finger and toe, so as to form a natural thimble of skin. Around each such thimble they wound a thread or a twist of wire to hold the nail in its place³. In the case of kings and wealthy persons, the thimbles of skin with their nails were kept in position by means of metal stalls. The mummy of Tutankhamūn had a set of gold stalls in position. It is specially to be noted that the head was not immersed, for it always retains the epidermis and the hair (unless the scalp had been previously shaved) and does not present the same appearance of emaciation as the rest of the body.

It has generally been assumed that the salt-bath was a long tank in which the body lay horizontally: but a little reflexion will show that if this were the case, it would be

¹ For the treatment of the heart, see especially ELLIOT SMITH, *Contribution*, etc. (*op. cit.*, *supra*), 17 and 28, and *Heart and Reins* in the *Journ. Manchester Oriental Soc.*, I, 1911, 45 ff.

² ELLIOT SMITH, *The Royal Mummies*, 33-4.

³ The nails were affixed in exactly the same manner by the Guanches of the Canary Islands. See my paper, *Proc. Roy. Soc. Med.*, xx, Part VI.

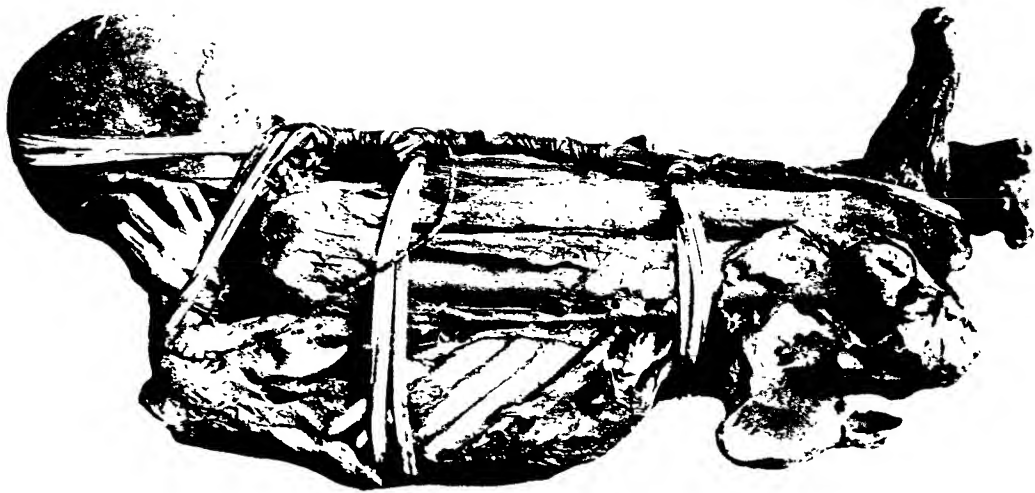
impossible to prevent the immersion of the head. I believe that the salt-bath was a large jar, in which the body was placed in a sharply flexed position, the liquid being poured in to the level of the neck, and maintained at that level after loss by absorption and evaporation. The head, while thus exposed, was preserved from disintegration by a thick coating of resinous paste. In order to accommodate the corpse to the confined space of the jar, it would have been necessary to double it into the smallest possible compass. This method of immersing the body (excluding the head) was suggested to my mind by the extremely contracted position in which Peruvian and Australian mummies are found. It will be observed that these mummies are in a position of extreme contraction and are not in the attitude assumed by the normal posture of a sitting man. The legs are bent sharply on themselves and compressed tightly against the body, and in some Australian mummies the knees are trussed up into so unnatural a position that they are actually forced behind the shoulders¹: in other examples the limbs are bound tightly to the body, the whole being made into a compact bundle (Pl. xvi, Fig. a). Peruvian mummies are similarly compressed². The intention in these cases is evidently to pack the body into the smallest possible compass. Dr. Blackman, who has made a special study of the significance of lustrations amongst the Egyptians, has collected a series of representations from tombs of the Middle and New Kingdoms, which depict in a highly conventionalized manner the washing of the corpse after it is taken out of the salt-bath, and before its final anointing and bandaging. In some of these scenes the corpse is represented in a sitting posture above a large jar, whilst the embalmer and a priest pour a stream of lustration-water over it. The whole scene is ceremonial in character, and is borrowed, as Dr. Blackman has emphasized, from the daily temple ritual of the king, and adapted to the ritual of embalming³. The washing of the corpse after its immersion in the salt-bath, however much it may have been formalized and invested with religious significance, was nevertheless an essential utilitarian process, for the body would be in an extremely unwholesome condition after having been packed for several weeks in a jar of saline solution. The liquid in the jar would be turgid with fatty acids and other organic matter from the corpse, besides containing a great quantity of macerated epidermis reduced to a pulpy condition, and it would therefore be necessary to purify the body thoroughly with clean water before the ensuing stages of the embalming could be proceeded with. Dr. Blackman sees in the large jar represented in the pictures previously referred to merely a medium for collecting the lustration-water, but I believe that it actually represents the salt-bath itself, out of which the body has just been lifted, making, of course, due allowance for the conventions of Egyptian drawing. Herodotus specifically states that the body was washed *after* its immersion and *before* its wrapping in bandages. This statement, taken in conjunction with the above-mentioned lustration scenes, appears to me to lend considerable probability to my suggestion that the salting was carried out in a jar. This suggestion, moreover, would explain the significance of a peculiar pottery figure, formerly in the Rustafjaell Collection, the meaning of which has not been understood hitherto⁴.

¹ See the example in FLOWER, *Journ. Anthropological Inst.*, VIII, 1879, Pl. XII.

² For examples see PETTIGREW, *History of Egyptian Mummies*, Pl. vi, Fig. 5; DAWSON, *Proc. Roy. Soc. Med.*, XX, Part VI.

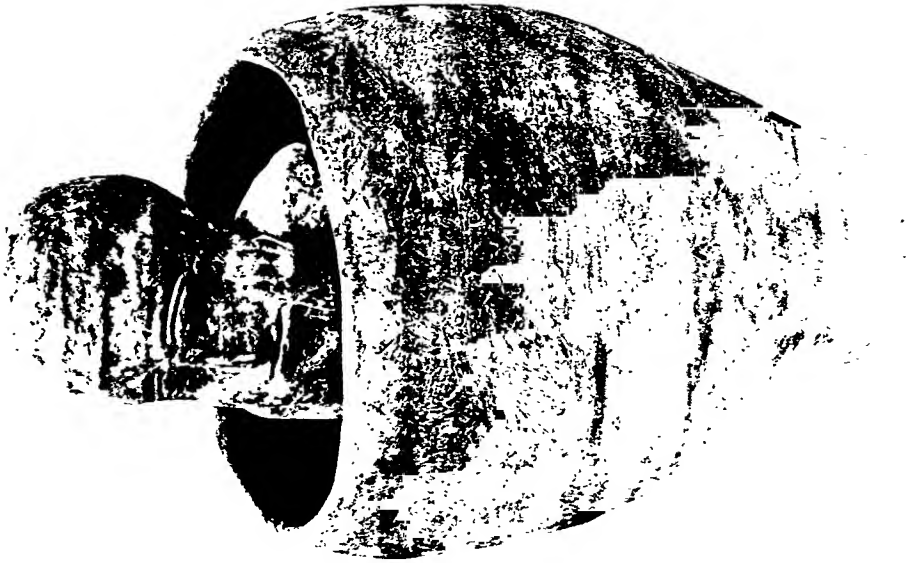
³ *Rec. de Trav.*, XXXIX (1921), 44-78, especially 53-5. See also his article *Washing the Dead* in *Journal*, V, 117 ff.

⁴ The present whereabouts of this object is unknown to me. The collection was disposed of by auction in 1913. In Sotheby's Sale Catalogue the object is Lot 295. A stone figure in the same attitude is preserved in the Wellcome Historical Medical Museum, and another, somewhat similar, is in the British Museum (No. 50945).



a.

a. North Australian mummy.



b.

b. Pottery figure representing a mummy immersed in the salt bath.

(Plate xvi, Fig. *b*). The figure is that of a man in a contracted posture squatting inside a large jar which reaches to the level of the chin. The limbs are folded closely against the sides of the body, and the hands are placed one on each cheek, a position frequently assumed by Peruvian and Australian mummies. Pettigrew figures a mummy from Peru with the hands and limbs exactly in this position. I cannot doubt that this figure is intended to represent a mummy in course of immersion in the salt-bath.

The body having been duly salted, washed, and straightened out into a horizontal position, would consist of little more than the skin, the underlying muscular tissue, and the flesh reduced to a spongy mass, hanging loosely upon the skeleton. Whilst the body was in this pliable condition, the embalmers of the Twenty-first Dynasty, by an elaborate process which Prof. Elliot Smith has fully described¹, packed the body under the skin with padding material, and moulded on this basis a life-like form and filled out the shrunken trunk and limbs into the plumpness they possessed during life. In the New Kingdom these modelling innovations had not been made, and such packing as the body received was done externally by padding the cavities with linen before the bandages were applied.

The next stage in the process of mummification is the most essential of all, yet it is not even mentioned by Herodotus, and is usually entirely ignored by modern writers—I refer to the desiccation of the body. Rouelle in 1754 from the examination of mummies came to the conclusion that complete desiccation had been accomplished², and Rouyer in 1822, speaking of desiccation, says “Cette opération dont aucun historien n’a parlé, était sans doute la principale et la plus importante de l’embaumement³.”

A very considerable amount of heat would be necessary in order completely to desiccate the corpse when in the condition that it would assume after its long immersion in the saline bath and its subsequent washing, but we do not know by what method heat was applied, nor the extent to which sun-heat or fire-heat respectively were employed. Without complete desiccation the subsequent dressings with resin would be of little avail, and it is probably the imperfect method of drying, or the total neglect of it, which accounts for the very fragile state of most mummies embalmed before the beginning of the New Kingdom. There is reason to believe that an advanced state of efficiency had been reached by the embalmers of the Pyramid Age (Dynasties IV–VI), and that thereafter the art deteriorated and was only made thoroughly efficient in the Eighteenth Dynasty. It seems unlikely that sun-heat alone could be the only medium for desiccation. The atmospheric conditions of the country and the abundance of insects would rather tend to the destruction than the preservation of a body exposed to their influence, and it therefore seems probable that fire-heat was used, through the medium of some apparatus of which we at present have no information. A discovery made in the season 1924–5 in a Theban tomb by Mr. S. Yeivin, excavating for Mr. Robert Mond, is interesting and suggestive in this connexion. In some of the chambers of the tomb “a vast number of dried mummies were piled up almost to the ceiling in a state of disorder....The mummies, to judge from their appearance, seem to have been dried over a slow fire, which would explain the smoky appearance of all the chambers and passages above⁴.” From

¹ *Contribution, etc., op cit., supra* and *Ann. Serv.*, VII, 155 ff.

² G. F. ROUELLE, *Sur les embaumements des Égyptiens* (Histoire de l’Académie Royale des Sciences, année MDCL), Paris, 1754, 123–50.

³ P. C. ROUYER, *Notice sur les embaumements des anciens Égyptiens*, in the *Description de l’Égypte*, 2nd edn., Tome VI—Antiquités—Mémoires, Paris, 1822, 461–89.

⁴ S. YEIVIN, *Annals of Archaeology and Anthropology*, XIII, 15.

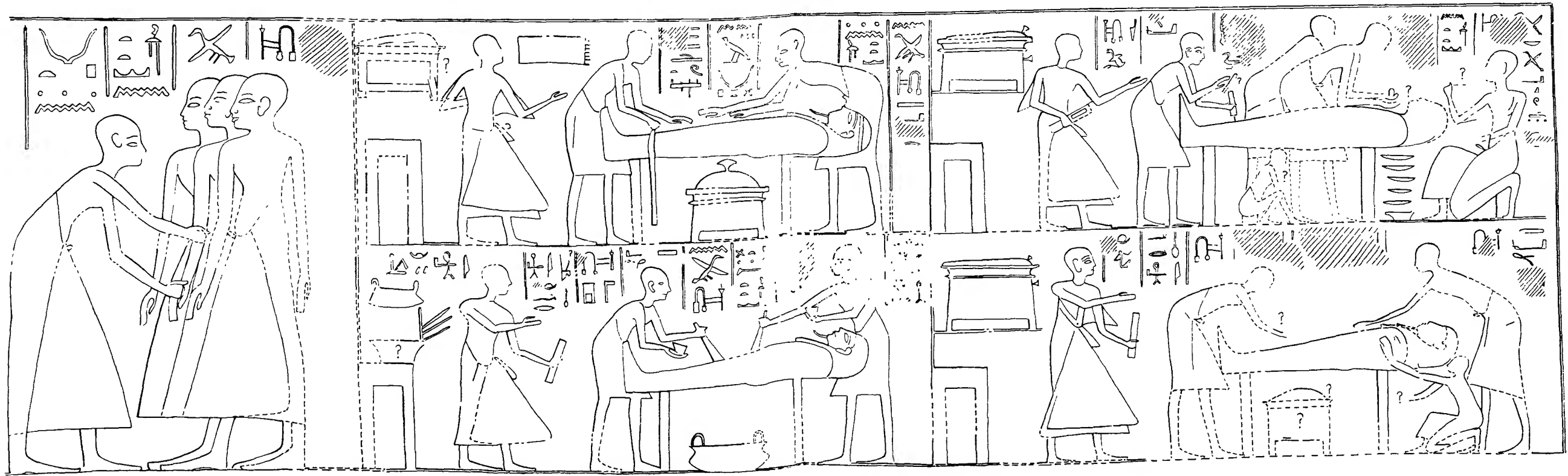
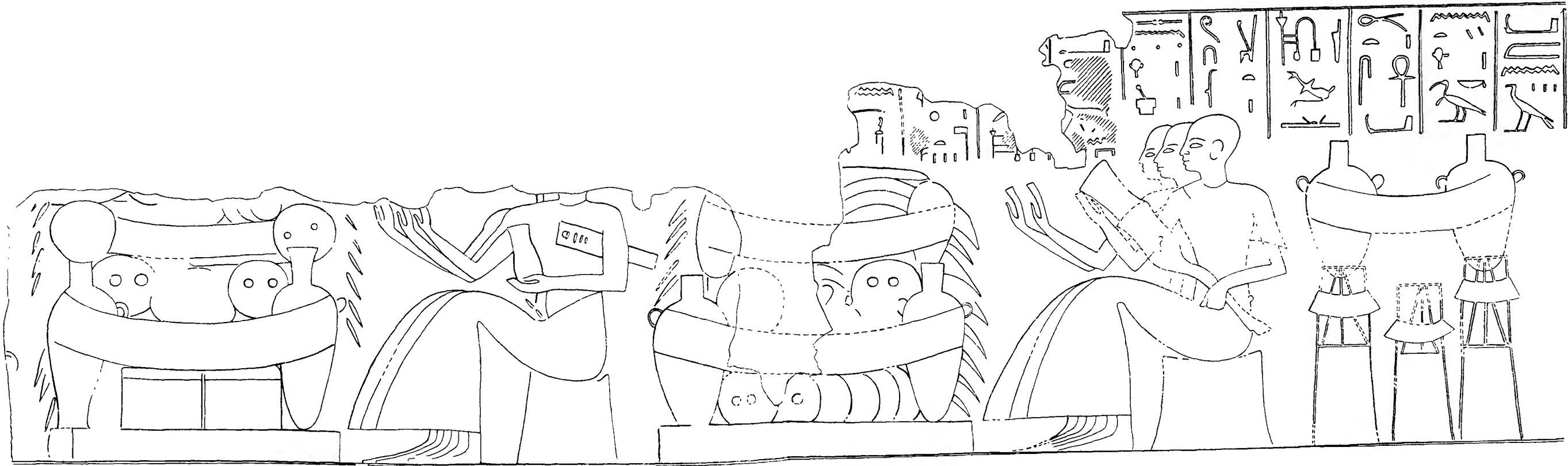
this it would appear that a chamber in an old and disused tomb had been utilized in later times as a convenient place in which to desiccate mummies. Many tombs in Egypt bear evidence of having been the scene of fire. The blackened ceilings and walls, with damage to the plaster and chemical changes in the colouring matter used for decorative purposes, and the above instance, may give a hint as to how they came to be in this condition. The above points are to be taken as no more than mere suggestions, for until the mummies have been minutely examined no definite evidence can be afforded by them.

However it may have been accomplished, the body was dried, and was then rendered more or less supple by a liberal application of a paste consisting of resin, mixed with natron or salt, and animal fat. In later times unmixed resin seems to have been used, and to have been poured into and over the body in a molten condition. Possibly also fire-heat was used to render the stream of resin more mobile, for it penetrates into every cavity and crevice, and even into the structure of the bones. I may take this opportunity of saying that bitumen, although described in modern books as the staple embalming material, was never used until Graeco-Roman times, and if then by no means universally. The resinous paste used by the embalmers of the New Kingdom was heated in order to render it freely liquid, and into it balls and wads of linen were dipped, and these were packed into the vacant body-cavity¹. The edges of the embalming-wound were then brought into apposition, and covered by a metal or wax plate, usually engraved with the symbolic eye. This plate required no fixing, for it became embedded in the thick coat of resinous paste with which the body was smeared. Occasionally the wound was sewn up by a running suture of string or a thin band of linen, but this practice was seldom resorted to, and in such cases no wax plate was used². The cranium was next packed with strips of linen dipped in resin, and the nostrils similarly plugged, their orifices often being closed by a lump of resin or wax pushed into the fossae. The body and limbs were then treated with more resinous paste, and the trunk and limbs separately swathed. After each had received several layers of bandage, the arms were arranged in position, either crossed on the breast or extended by the side of the trunk (the positions varied from time to time) and the wrapping then proceeded over the whole, body and limbs together. During the anointing and bandaging processes, a priest recited from a service book the appropriate liturgy.

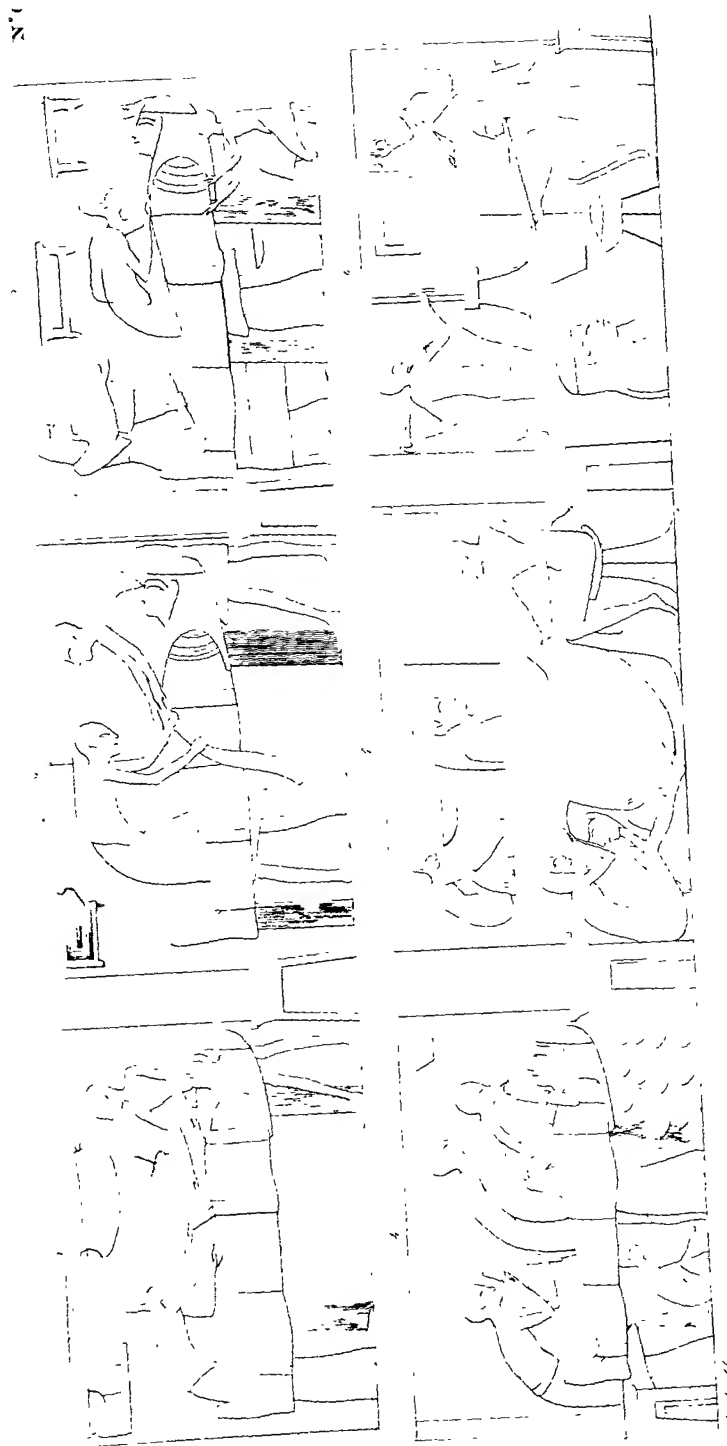
In two of the Theban tombs (and possibly more) pictures of bandaging the mummy have survived. In that of Thoy (No. 23, Dynasty XIX) are four badly damaged scenes each of which represents an episode in the ritual of embalming (Plate xvii). The theatre of operations is the embalmer's workshop, the door of which, following the usual convention, is shown on the left side of each picture. The mummy lies extended, and is supported upon two blocks or pedestals, and two men, one at the head the other at the foot, proceed with its toilet. Between the mummy and the door stands a priest holding a papyrus and making ceremonial gestures. In the first scene the operators have their hands extended over the mummy, apparently adjusting its bandages. The inscription is too fragmentary to enlighten us, but the remains of the determinative show that it was concerned in some way with cloth and refers to the bandages. In the second picture, one of the operators is kneeling, but the scene is so mutilated, that little can be learned from it. The third picture is more complete, and gives some interesting details. Herodotus tells us that the linen bandages were smeared with "gum," and here we see

¹ In the Twenty-first Dynasty the viscera were separately embalmed and wrapped in linen parcels and restored to the body-cavity. Such free space as remained was filled with packing material.

² Examples in Dynasties XVIII-XX are the mummies of Thuiu, Siptah, Seti II and Ramesses IV.



Mummification scenes from the tomb of Thoy.
After a drawing made in 1925 by N. de Garis Davies. Scale: $\frac{1}{2}$.



Mummification scenes from the tomb of Amenemope.
After Rosellini.

the two operators actually applying this "gum" (resin) to the bandages. Each holds a saucer in one hand, and with the other applies the liquid with a brush. Under the mummy is a large two-handled pan from which they replenish their saucers, and over the door is a similar pan heating upon a stove or brazier to replace the first pan when empty. The examination of mummies themselves makes it quite evident that the resinous paste was applied to the body and to the bandages hot, and it is interesting to find this confirmation. The Rhind Papyri also state that the paste was heated¹. The text when complete described the picture, and just sufficient of it remains to read "applying the paste." The fourth scene is too badly damaged to give us any information, but it is evident that further bandages are being applied, as a chest or coffer now replaces the brazier of the former scene. In another tomb, that of Amenemope (No. 41), a very similar series of scenes, six in number, formerly existed. A copy made by Rosellini a century ago has fortunately been preserved (Plate xviii), for all that is now left of the pictures is the poor fragment reproduced in the accompanying Figure 1, which Mr. Norman de Garis Davies was kind enough to sketch for me from the original last year². The

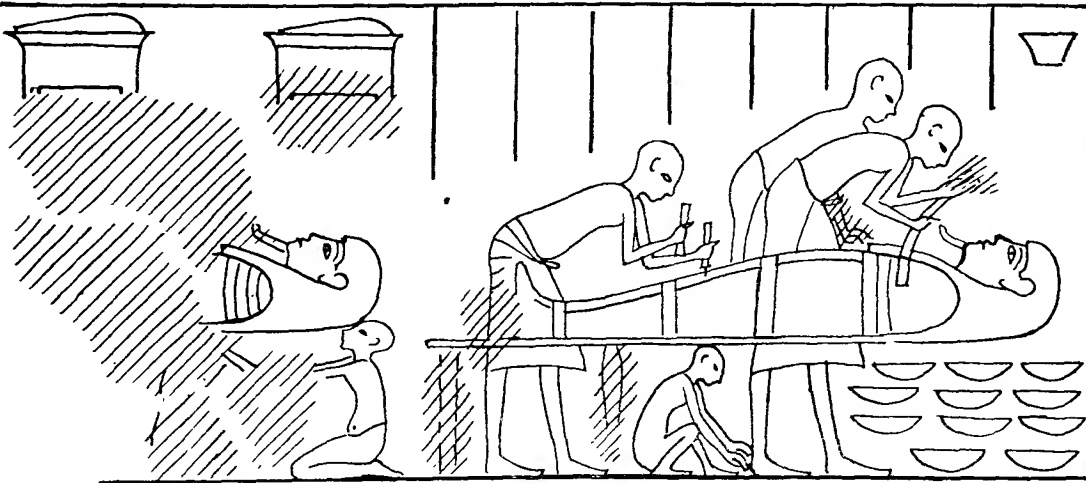


Fig. 1

first scene shows the brazier and the application of hot resin, as in the other tomb, and the others represent the bandaging of the mummy, the decoration of the cartonage mask and other objects connected with the embalming. The fifth scene is of particular interest. The rectangular object over the head of the seated man on the right, seems to be the board with its transverse bars upon which the mummy was laid when the first operations were performed upon it. The seated man cleaning out a large jar may have in his hands either the jar in which the salting was carried out, or else one of the jars in which the embalming materials were stowed after the process had been completed. All the materials used, including the soiled linen and surplus drugs, were carefully packed into jars, and placed in the tomb or in a small chamber or pit near it³. Occasionally these materials were put into a coffin⁴, such was the respect with which they were treated, for it must

¹ *Papyrus Rhind No. I*, p. 3, l. 6, *No. II*, p. 4, l. 3.

² Mr. Davies was also kind enough to copy the scenes in Tomb No. 23, reproduced in Pl. xvii. For the photograph of Rosellini's drawing, I am indebted to Prof. Capart.

³ Several such dumps of embalming materials have been discovered in recent years. For examples, see WINLOCK, *op. cit.*, 1922, 34 and 1924, 32, QUIBELL, *Tomb of Yuaa and Thuin*, VI and 75.

⁴ NAVILLE, *Deir el Bahari*, Part II, 6; WINLOCK, *op. cit.*, 1922, Fig. 30 and p. 32.

not be forgotten that the whole process of mummification, apart from its avowed physical purpose of preserving the body from decay, was a religious ceremony closely connected with the cult of Osiris.

It is not necessary to describe in detail the treatment of the organs which were removed from the body. It is not known what was done with the brain; Herodotus does not refer to it, and it is probable that it was treated as waste, for it must have been removed in very small fragments through the nose. The viscera were wrapped into four parcels, and each parcel was placed, under the protection of one of the Four Sons of Horus, in an appropriate Canopic jar. These jars have been found of all periods from the Fourth Dynasty onwards. During the Twenty-first and Twenty-second Dynasties the practice of placing the viscera in Canopic jars was given up, and they were wrapped in four parcels, each with a wax image of its appropriate guardian deity, and returned to the body¹. Canopic jars of this period are known, but they are dummies, and figure amongst the burial equipment merely in servile obedience to the old tradition². The use of Canopic jars was revived during the Saïte period, but at that time a new method of disposing of the viscera was introduced, for they were often covered with spices and placed between the legs of the mummy.

The general method of mummification summarily described above was not the only one in use, for mummies have been found without embalming-wounds, and these were either eviscerated *per anum*, or were not eviscerated at all. Herodotus' "second method," that of removing the viscera in a fluid state by means of cedar oil, is not possible as he states it; but the injection of a corrosive or astringent fluid might have arrested decomposition until the body was ready for desiccation. In certain cases some of the viscera were actually excised *per anum*³, and in others no attempt at all had been made to remove them. I recently examined two well-preserved mummies of the Twenty-sixth Dynasty which had been neither eviscerated nor immersed in a salt-bath, yet both were in an excellent state of preservation. There was no embalming-wound, nor had the anal method been resorted to. The epidermis was intact, and all the body-hair was present, for it happens that these mummies were both of muscular men, with abundant hair on the chest and limbs. The nails were *in situ*, and had not been artificially attached. The bodies had been merely desiccated, then covered with a liberal supply of resinous paste in which numerous white crystals can be seen⁴. The skin is soft and flexible, and the bodies do not show the considerable shrinking which inevitably occurs whenever the salt-bath has been used⁵.

Another method of preservation was to sprinkle the body after desiccation with crude natron. This has a corrosive effect on the bandages nearest to the body, which often present the appearance of having been scorched or burnt. This sprinkling with natron was common in the New Kingdom and was probably intended to absorb any moisture which might exude from the body or from the paste with which it was coated.

The application of the bandages was a long and complicated process. The *Ritual of Embalming* gives directions for anointing and bandaging the head, back, hands and legs.

¹ ELLIOT SMITH, *op. cit.*, *supra*.

² *Journal*, v, 273.

³ DAWSON, *Journal*, xi, 76.

⁴ This efflorescence may have been fatty acids. See LUCAS, *Preservative Materials used in Embalming*, 35.

⁵ The mummy of Tutankhamûn has been described as much emaciated. This need not imply emaciation as an ante-mortem condition. The methods of the Eighteenth Dynasty embalmers would always reduce even the plumpest body to the state of a mere skeleton covered with shrunken skin.

The bandages all had magical names, and as each was applied a long utterance was recited by the priest. According to this text, many of the bandages were inscribed with their names or had drawings traced upon them. So far as I am aware, the only attempt hitherto made to verify the particulars of the Ritual by observation of the bandaging of actual mummies is that made many years ago by the late Professor Macalister, but as the mummies he examined were of various dates, and little was known as to their age or provenance, he did not obtain any useful results¹.

With regard to the preservative materials employed, little need be said here, as the chemical analyses of many specimens have been published. In general terms, it may be said that for the immersion-bath common salt (mixed with various impurities), and not natron, was used. For the subsequent anointing, the principal ingredient was juniper-resin. The resins of several coniferous trees have been identified, and cedar and olive oil were also used. The presence of alcohol in some of the tissues lends support to Herodotus' statement that palm-wine was used for cleansing. Crude natron, as mentioned before, was often sprinkled upon the body after treating it with resin as a dehydrating agent. The resin, which was used in large quantities in mummies of late periods, was applied in a molten condition, and in this state often closely simulates both pitch and bitumen, but must not be confounded with these substances as is usually done; there is as yet no evidence that bitumen was ever used. With regard to the packing materials, apart from rags of linen which formed the exclusive material used for filling the body-cavity in the Eighteenth and Nineteenth Dynasties, lichen, sawdust, sand and mud were used in the Twentieth and succeeding dynasties, and sometimes a mixture of butter and soda was used for packing the face.

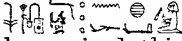
Such in outline is a summary of the processes to which the body was subjected by the embalmers of the New Kingdom. In writing this account I am conscious of the fact that I have added yet another to the well-nigh innumerable accounts of mummification already extant in Egyptological books. I hope, however, I may claim to have once more called attention to the many misstatements with which we are all familiar, and to have suggested some additions to our knowledge of the subject, particularly as regards the order of procedure, the method of employing the salt-bath, the importance of desiccation, and the temporary nature of the embalmer's workshop.

¹ *Journ. Royal Anthropol. Inst.*, XXIII, 101-21. In *Archæologia*, XXXVI, 161 ff., a mummy is described the bandages of which have pictures of gods drawn upon them.

NOTE ON THE NATURE AND DATE OF THE "PAPYRI" OF NAKHT, B.M. 10471 AND 10473

By S. R. K. GLANVILLE

With Plates xix—xxi.

For some years there have been exhibited among the funerary papyri in the Sixth Egyptian Room of the British Museum¹ four sheets of a papyrus numbered 10471 and one of a similar document numbered 10473. They were both acquired for the Museum in 1888 by Sir Ernest Budge, who in 1898 pointed out² the importance of the former, which is by far the longer of the two. This copy of the *pṛt m hrw* ritual was 47 feet long, before it was cut up for mounting into 22 sheets of varying length, and contained many chapters; but it is remarkable for the design and execution of its vignettes, the best examples of which are exhibited in Case H of the Sixth Egyptian Room. It is inscribed with the name of a "Royal Scribe and Military Commander" Nakht, . Originally it was dated by Budge to the Twentieth Dynasty³, but later he revised this opinion, and assigned it, or, at any rate, its owner's lifetime, to the Nineteenth or Twentieth Dynasty⁴. This revised dating is very satisfactory for our purposes; but I hope to show that we can go further, and exclude the Twentieth Dynasty from consideration.

The B.M. "Papyrus" 10473 is only a fragment; valueless (at all events at first sight) as a source for the compilation of a text of the "Book of the Dead," but of considerable interest because of certain peculiarities—some of them unique—in its general make-up. In the first place the material used for this document is not papyrus, but vellum⁵, which from the examples that have survived appears to have been even more rarely used than leather⁶ as a writing material. In this respect I believe B.M. 10473 is unique among copies of the *pṛt m hrw*⁷, but the fact is of no value beyond its intrinsic interest⁸. This vellum roll, or as much of it as reached the British Museum, was originally 4 feet 8 inches long, and has been divided into three pieces which are pasted to stout paper and mounted in glazed wooden frames. It was appropriated to the use of a man with the same name and titles as the owner of B.M. 10471, and there is ample evidence to show that the persons

¹ See BUDGE, *A Guide to the Fourth, Fifth and Sixth Eg. Rooms, etc.*, 1922, 294.

² BUDGE, *Book of the Dead*, 1898, Text, xix f. Only one text is taken from this papyrus, namely the Hymn to Rē on sheet 21.

³ *Ibid.*

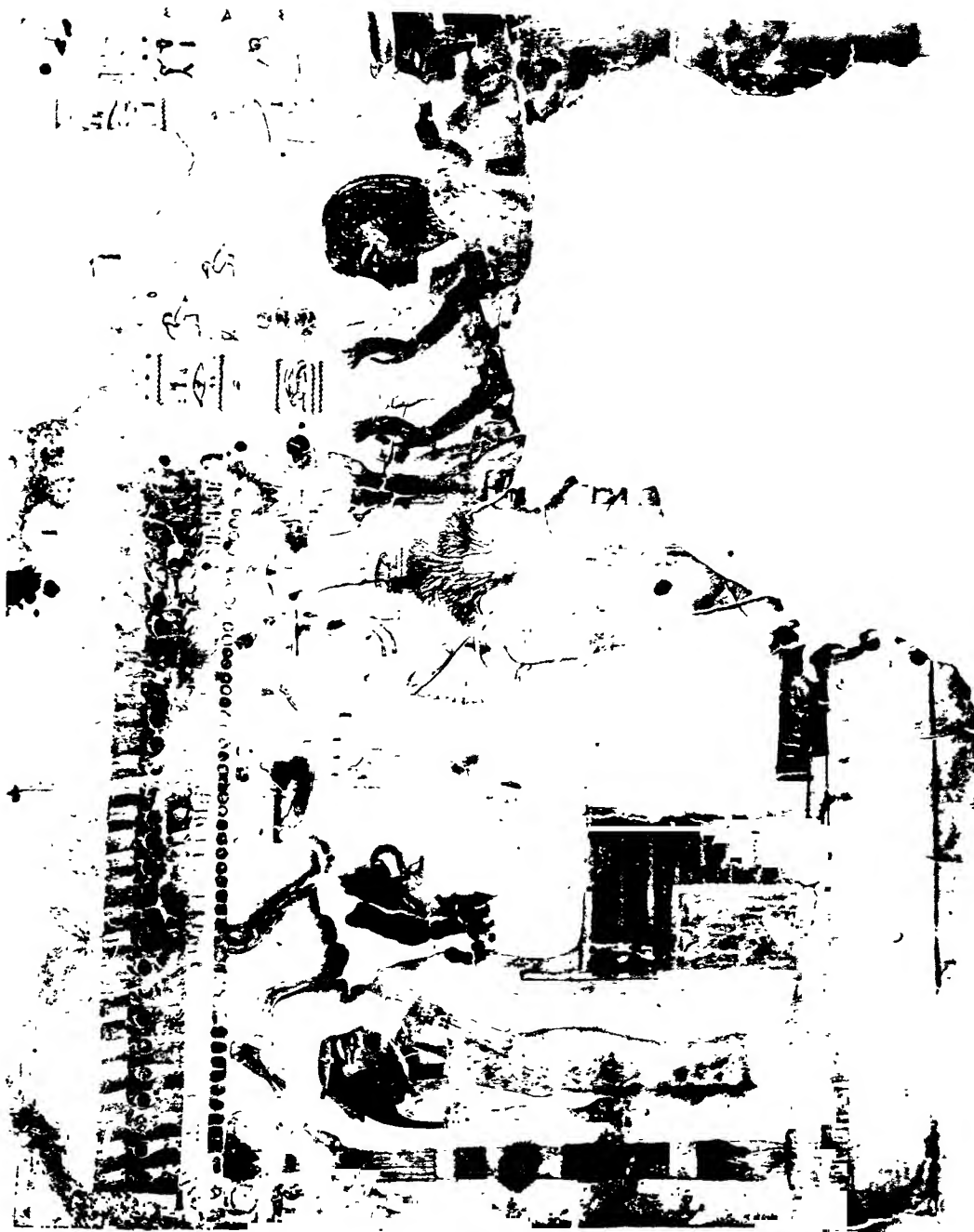
⁵ Cf. BUDGE, *ibid.*, also below, note 8.

⁴ BUDGE, *A Guide to the Fourth, etc.*, 294.

⁶ Cf. *Journal*, XII, 171, for a leather roll.

⁷ Dr. Gardiner tells me that there is a "vellum" roll of accounts from the New Kingdom in the Louvre.



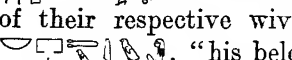
⁸ The name "vellum," although an anachronism, is retained here for want of a better. "Parchment" (of which vellum was a more refined development) is scarcely more correct, since our document is over a thousand years earlier than the invention of that material. At the same time the "vellum" roll is nearer in quality to parchment and vellum—the specially prepared skins of sheep and goats, on the one hand, and kids and calves on the other—than to the thick dark-coloured leather to which we are accustomed as an occasional writing-material. But while much less thick than such leather, it differs from the later materials in having (apparently) only one side prepared to receive writing. It is worth noting that as a result of recent analytical examination of New Kingdom leather remains, goat skin has been identified in a number of cases. (See LUCAS, *Ancient Egyptian Materials*, 197 f.)



Funerary papyrus of Nakht (Brit. Mus. 10473).











Nakht adores Osiris.

Scale: nearly full size.

named in the two documents are one and the same, a fact which is clearly implied by Budge in his description in the *Guide*. In addition to sharing the same official titles,  and , the two Nakhts both associate with themselves in the ritual representations of their respective wives¹, whose names and titles are also identical—, "his beloved sister, the singer of Amūn, the Lady of the house Thuiu." A comparison of the variant writings of Nakht's titles and of the laudatory phrases with which he describes himself in the two works gives further proof, as the following table shows:

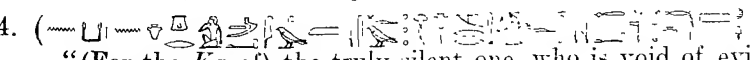
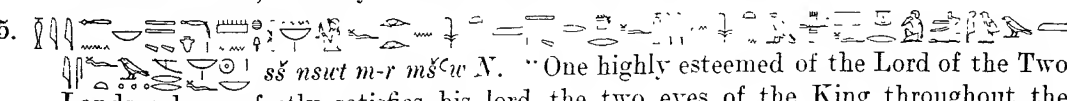
B.M. 10471².

B.M. 10473.

- | | |
|---|--|
| 1.  (var. )..... | 1.  |
| 2. <i>ss nsut m-r mšw</i>  N. | 2. <i>ss nsut m-r mšw</i>  N. |
| 3. <i>ss nsut</i>  <i>m-r mšw</i> N. | |
| 4. <i>ss nsut mš mr-f m-r mšw</i> ³  N. | |
| 5. <i>ss nsut mš mr-f</i>  N. | (Cf. 5 below, opening phrase.) |
| 6. <i>ss nsut mš mr-f m-r mšw n nb tšwy</i>  N. | 3. <i>ss nsut m-r mšw n nb tšwy</i>  N. |

1. "The Royal Scribe and Military Commander Nakht."
2. "The Royal Scribe and Military Commander of the Lord of the Two Lands, N."
3. "The true Royal Scribe whom he (i.e. the king) loves, the Military Commander N."
4. "The true Royal Scribe whom he (i.e. the king) loves, the Chief Military Commander of his Majesty."
5. "The true Royal Scribe whom he (i.e. the king) loves, highly esteemed of the Lord of the Two Lands, N."
6. "The [true]⁴ Royal Scribe [whom he (i.e. the king) loves]⁴, the Military Commander of the Lord of the Two Lands, esteemed of the Good God, N."



In addition, B.M. 10473 gives two much longer descriptions:

4. 
 "(For the Ka of) the truly silent one, who is void of evil, who is well disposed (?), the beloved of his majesty, one highly esteemed of the Good God, one who perfectly satisfies his lord, the Royal Scribe and Military Commander, N."
5. 
 "One highly esteemed of the Lord of the Two Lands, who perfectly satisfies his lord, the two eyes of the King throughout the entire land, esteemed of the King in his palace, one truly silent, who is void of evil, one loved of his lord every day, the Royal Scribe and Military Commander, N."

A final piece of evidence for the identification of the two Nakhts is the marked similarity in the writing of the names and titles where these have been inserted after the completion of the roll of texts. The combination of all these facts—the identity of the two men's names and titles, and of their wives' names, of many of the honorific phrases

¹ Whatever the legal status of a *sut* as opposed to a *hwt* may have been it is quite clear that the lady, Thuiu, was in effect the wife of Nakht.

² For a good reproduction in colour of the last sheet of this Papyrus showing Nakht and Thuiu adoring Osiris, see the *Frontispiece* to BUDGE, *Osiris and the Egyptian Resurrection*.

³ Written , the  obviously a mistake for ...

⁴ Bracketed parts in 10471 only.

in their descriptions, and of the handwriting of the inserted names and titles, which is differentiated from both the two distinct hands of the rest of the texts—leaves no room for doubt that there was but a single owner for the two rolls. That being the case it would be natural to assign B.M. 10473 also to the Nineteenth or Twentieth Dynasty. There are reasons, however, for putting its date earlier than the Nineteenth Dynasty.

Sheet 2 of the vellum roll which is exhibited in the Galleries derives its position not only from the nature of the material, and certainly not from the texts inscribed on it¹. These are too familiar² to contribute anything to the importance of the sheet: but the vignette is so finely and so naturalistically executed that it has compelled special attention in spite of the familiarity of its subject matter (Pl. xxi, Fig. *b*). It is extremely unfortunate that at some time in antiquity the roll has suffered from fire, which has not only destroyed a large part, but has also discoloured much of what remains, of sheet 1 (Pls. xix and xx). By the actual destruction of the vellum we have lost a comparatively short piece of text, which, however, we can ill spare since it contained the names of Nakht's youngest daughters—a possible means, at some later date, of identification—besides a large part of the best representation of Nakht. The brown and black smudges of the burn have obscured, without making impossible, the reading of the signs and an appreciation of the drawing. But the double effect of complete destruction and partial discoloration is to make what is still by a long way the most interesting vignette of the roll, almost too unsightly for exhibition. This vignette is the most important of all those which occur in the Theban recension of the *pṛt m hrw*, namely the appearance or presentation before Osiris of the dead man or woman, usually—as here—in the company of his or her consort. The whole scene in B.M. 10473 is beautifully coloured with a delicacy equalling the best specimens of this work. As an example of fine painting in funerary texts it would be worthy of publication by itself were it in better condition. As it is, the archaeological evidence contained in the vignette is perhaps of greater interest than its artistic merit. The general indication of the technique suggests the Eighteenth Dynasty as the date of the copy. The date is confirmed by certain details which are all associated with the Eighteenth rather than with the Nineteenth Dynasty. They are, first, the forms of the hieroglyphs both in this vignette, where they are painted with full detail, in black, red, yellow, blue and white; and in the rest of the text, where they are drawn in outline. In both cases the most important forms are those of the \mathfrak{J} with dotted edge, and of the stubby, looped arms of the \mathfrak{U} . Secondly, the gemination of \mathfrak{H} in the phrase *mrr hm:f* (cf. *mrr nb:f hrw nb* in col. 15 of sheet 2). Thirdly the use of honorific clichés reminiscent of Middle Egyptian stelae. At the same time, the fully developed and generously coloured technique of the actual painting shows that the work was done towards the end of the period; while its fine execution and accuracy, which saves it from the epithet “florid,” marks it out as distinct from the style of the Nineteenth and Twentieth Dynasties. An examination of the details strengthens the general impression, and will, I think, enable us to define the date of the roll more closely.

The canopy, under which Osiris is seated, is, with its supporting pillars, an excellent example of that *embarras des richesses* in the decoration of furniture and *objets d'art* which we now have good reason to believe reached its zenith at the time of Tut'ankh-Amūn. The uraei round the roof, and the striped cornice, can be paralleled not only from

¹ See below, p. 54.


² The titles and descriptions of Nakht in cols. 13–15 are of course exceedingly interesting for the present discussion.



Funerary papyrus of Nakht (Brit. Mus. 10473).

Nakht and his wife and daughter adore Osiris.

Scale: nearly full size.

actual remains¹ and from representations in the tombs², but also from other examples of this vignette in funerary papyri³; but the care with which the detail of each individual uraeus has been painted is noteworthy, and with its obvious representations of inlaid glass and glazes reminds us forcibly of the popularity of inlay work at Tell el-'Amarnah⁴. The columns are of a type known from a number of tombs⁵ to have been commonly used in such constructions, where the bird (under the left-hand edge of the uraei) is frequently found; but the use of the gazelle's head to support rosettes (left column), or as a gargoyle (?) (right edge of cornice), is perhaps unique, certainly very rare. The frequent occurrence of the gazelle as a *motif* in the art of Tell el-'Amarnah is another indication of the period of the work. Lastly, there is a very remarkable feature about our vignette, which so far as I know is unique among copies of the *pṛt m hrw*. The appearance of a man and his wife together in this scene is as common, if not more usual, than the presence of one or other alone. But there are never more than those two persons. In the vignette of B.M. 10473 Nakht and his wife are followed by four daughters—the eldest, whose name is the only one not destroyed, Takaykay (Takayi?) is described as "his daughter"—standing immediately behind Thuiu, and as the last is still a very small child, we may conclude that this is their whole family. The unusualness of this group in a funerary text is at first sight disguised, for the portrayal of a man's whole family on funerary stelae or tomb-walls is typical of Egyptian art and religious ideas; but it is not possible to parallel this actual scene on either. The nearest approach to it, however, is in representations of Akhenaten and his family at El-'Amarnah—worshipping the Aten or honouring a noble, or sitting at meat⁶. Indeed, so close is the parallel in the tomb of Paneḥsy⁷, that if we were to put Osiris in the place of the Aten and its rays, we should have a replica of the scene from our vignette⁸. Thus all the evidence points to one thing; that the artist who prepared this copy of the *pṛt m hrw* was working under the direct influence of the 'Amarnah period⁹, if not in that period itself. There is nothing to suggest the latter; it is impossible to suppose that there was any place at all for the old Theban *pṛt m hrw* in the Atenist theology¹⁰. Moreover, Nakht's wife was a ¹¹. We must date the roll, therefore, after the return of the court to Thebes, probably in the reign of Ai or Horemheb¹².

¹ Viz., Shawabti boxes, e.g. B.M. 35762; furniture, e.g. B.M. 55327. etc.

² See DAVIES, *Rock Tombs of El-Amarna*, *passim*.

³ E.g. the Papyrus of Ani (B.M. 10470), sheet 4. Cf. the *sbht* s in the Pap. of Nebeni (B.M. 9900), sheet 4.

⁴ See PETRIE, *Tell el-Amarnah*, Pl. vi, 10 and 12.

⁵ See JÉQUIER, *Man. d'arch. égypt.; architecture*, 169, with note 1 and fig. 93.

⁶ E.g. DAVIES, *op. cit.*, IV, Pl. v; v, Pl. iii; II, Pl. x; III, Pl. vi.

⁷ *Ibid.*, II, Pl. v.




⁸ It appears from the representations in the Tombs that during Akhenaten's lifetime only the Royal family was allowed to be shown in private tombs; the one exception being the small daughter of Paneḥsy. (See DAVIES, *op. cit.*, II, 28.)

⁹ Smaller points of evidence in the technique of the painting are (1) the unusually full curves of the women's thighs, (2) the realism of the figures in the vignettes on sheets 2 and 3, giving them a lifelike appearance in spite of the hieratic poses, (3) Nakht's simpler dress (sheets 2, 3, Pl. xxi, Figs. *a* and *b*) falling just below the knee, in typical El-'Amarnah fashion, as opposed to the long, full dress which he wears in 10471, (4) the nakedness of the youngest child, analogous to many of the representations of the young princesses at 'Amarnah.

¹⁰ But cf. HALL, *Ancient History of the Near East*, 303, with Note 3.

¹¹ But see PEET and WOOLLEY, *City of Akhenaten*, I, 95 f., who discuss a stele on which Shed and Isis are worshipped by a devotee of the Aten, and assign it to the reigns of Sakerē or Tutankh-Amūn.

¹² For the type of inscription with full honorific phrases see GUNN in PEET-WOOLLEY, *op. cit.*, 145, Pl. vii, 4; and for the shorter phrases—*ḥsy ʿs n nb twy*, etc.—cf. DAVIES, *Rock Tombs*, *passim*.

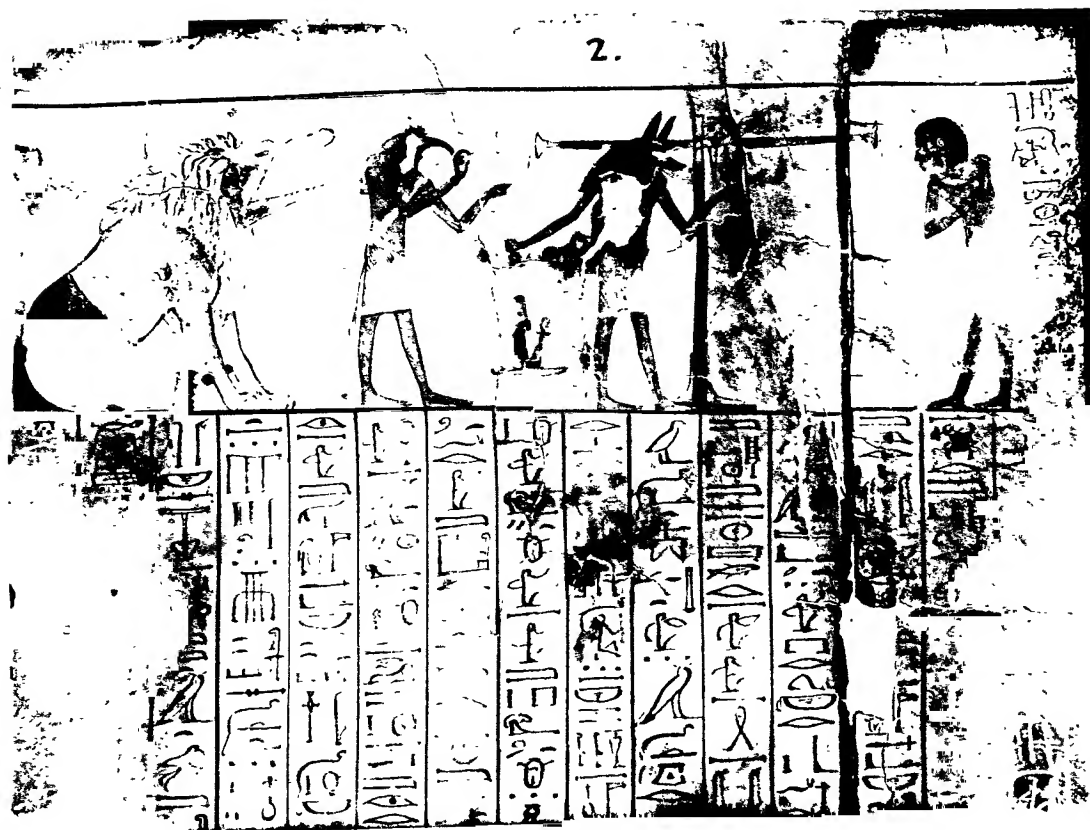
It remains to try to solve the double problem of there being (a) two copies of the *pṛt m hrw* for one man, (b) written at different dates. The dates themselves are not inconsistent with the lifetime of a single man. An official who started his career under Akhenaten might be expected to live well into the first half of the Nineteenth Dynasty, and in view of the apparent continuation of royal favour to the end of his life, it seems more probable that Nakht began his career after the Aten heresy had been discarded. While therefore defining the date of 10471 more closely than Budge did, we shall still keep within the period suggested by him if we assign the papyrus to the early part of the Nineteenth Dynasty. B.M. 10471 was not written "to order" for Nakht, still less was it his own handiwork, as was the case with some well-known copies of the *pṛt m hrw*. The insertion of his name and titles in a more cursive and less formal handwriting than that of the rest of the book in spaces left in the text and beside the representations of the dead man in the vignettes shows that this roll was bought in the ordinary way from an undertaker or professional scribe. But whereas sheet 22, which consists of a piece of un-inscribed papyrus 14 by 5½ ins., shows that the Hymn to Rē^c, with its handsome vignette, was the original end of the papyrus, the torn right-hand edge of sheet 1 shows that we have lost the beginning. B.M. 10473, on the other hand, appears from what remained of the right-hand edge of sheet 1 to have originally begun with the large vignette which occupies the whole of that sheet, while the ragged left-hand edge of sheet 3 indicates that there was once more to follow. That both documents are incomplete is also apparent from the fact that the two torn edges—the end in the case of the earlier, 10473, and the beginning in the case of the later, 10471—occur in the middle of a chapter. But the interesting point is that the chapter is the same in both cases—*viz.*, CXLV, or rather an abridged version of it. The vellum roll ends with the address to the fifth ¹: the papyrus begins with the address to the fifth ¹. The vellum roll has been torn carefully, with the evident intention of preserving the whole of this address, although the ends of a few signs are lost. But the papyrus, on the contrary, is so raggedly torn that we must conclude either that it was an accident, or that the person who did it was not concerned to preserve the section. Nearly half of it, in fact, is lost. 10473 contains, besides the vignette from chapter CXXV (Pls. xix and xx), chapters XXX B, XXVI and XXX A (sheet 2), an address to  (the "Arits," a version of CXLIV) and the beginning of chapter CXLV. None of these is duplicated in 10471 which contains chapters I, VIII, XI, XIII, XVII, XVIII, XXIII, XXXI, XXXIII, XXXVI (twice), XXXVII, XXXVIII A, XL, XLII, LXII, LXIII A, LXIV (twice), LXV, LXXI, LXXII, LXXVII, LXXX, LXXXI A, LXXXII, LXXXIII, LXXXIV, LXXXV, LXXXVI, LXXXVII, LXXXVIII, LXXXIX, XCV, XCIX, CIII, CXVII, CXXV, CXXXVI A and B (twice), CXLV, CXLIX, CL, CLIII A, CLV, CLVI, and two Hymns to Rē^c. One cannot believe that it was an accident that has made it possible to juxtapose the two rolls at their respective breaks and thus produce a continuous copy of the *pṛt m hrw*, complete at both ends. It is not possible, now that they have been mounted, to examine the backs of the papyrus and vellum in the region of their breaks, so that we can never know if they were actually joined in ancient times. But it is quite clear that they were regarded as one continuous document when Nakht's name and titles were inserted in the text, in order to supply him with an adequate copy of the *pṛt m hrw*.

The final proof of the single purpose of the two rolls is contained in the identity of the handwriting of Nakht's name and titles in both. B.M. 10473, like 10471, appears to

¹ The signs are in the order in which they occur in the two texts, though of course (in both cases) they are there written vertically.



a.



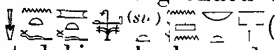

b.


Funerary papyrus of Nakht (Brit. Mus. 10473).

a. Nakht adores the guardian of the first *šbht*.

b. Nakht watches the weighing of his heart.


Scale = $\frac{1}{2}$.



have come from an undertaker's stock in hand. The names and titles of Nakht, including the long list of honorific phrases in the last two columns of sheet 2 (see above, p. 51), are all inserted in the text (or beside the vignettes), in a handwriting quite distinct from its own, but identical with that of the insertions in 10471. On the other hand, it is abundantly clear that these honorific phrases are merely signs of the times with no real value, since the majority of them occur in the elaborately painted inscription over the large vignette on sheet 1. They were evidently considered the correct introduction, at that time, to the titles of anybody of importance. Nakht's *real* titles and his name, here as elsewhere, are in a different hand; but in order not to let this appear too obvious, the black ink of the *linear* hieroglyphs has been overlaid with red, and, where they occur, spaces are filled in with yellow. Even so it hardly requires a second glance—in spite of the fading of the colours in the surrounding painted inscription—to detect the difference. Column 8 having ended with Nakht's name, the inscription continues with the words: (9)  (10) , col. 9 being written with full, painted hieroglyphs, and col. 10 with clever imitations of these, which, however, only deceive for a short time. The hieroglyphs have not quite the linear appearance of those used in Nakht's name, chiefly because the latter do not offer much opportunity for filling in the body of the sign with colour; but the technique is entirely different from that of the proper painted hieroglyph of the first seven columns of the inscription. There the outline, if any, is in red or black—never both: in the imitation, the outlines of all the signs are done in black, which is then inked over—in almost every case—with red, the field being filled in everywhere¹ with yellow. The general effect, however, at first sight closely resembles the rest of the inscription, the last five columns of which (containing names of the daughters) are lost².

It is clear, then, that at the period when the vellum roll was inscribed it was customary to add the words "his beloved wife, the singer of Amūn," leaving a space for the name and those of any children to follow. That it was further customary to represent the children also seems certain, since the figures of the four daughters were evidently put in with the rest of the vignette. The universality of the title , implied by its use here in a "ready-made" article, is convincing evidence for the assumption made above that Nakht was in favour at Thebes well after the fall of the Aten worship, *i.e.*, in the reign of Ai or Horemheb.

It has been shown that the B.M. "Papyri" 10471, 10473, which must be presumed to have been originally separate documents, were actually used as one. We still have to explain—if we can—how that came about. It is not credible that the two rolls were acquired as a single text of the *pri m hru* after Nakht's death. The difference in their dates by itself quashes that idea.

On the other hand, the evidence of the damage received by the earlier roll, suggests that this was acquired by Nakht long before his death, for some reason which we cannot guess, and was almost destroyed by fire during the time that elapsed before it was required. Only the beginning remained, and that was badly damaged. But after trimming the ragged left-hand edge, nearly five feet of the roll were left. Sentiment or thrift may have been responsible for its preservation; probably the former, since it must have been necessary to buy a complete new copy of the work to obtain the 47 feet which were added. Whoever tore the *papyrus* in two was careful to allow himself the greater part of

¹ The  of *Twiw* is the only possible exception.

² At the bottom of cols. 13 (?) and 15 (?)  and  respectively are legible.

a section (the address to 𐎧𐎠𐎫𐎠𐎥𐎢𐎽) to spare, but took no trouble with the trimming. In fact, we may probably argue from the difference between these broken edges that the two pieces were never actually joined. The priority of 10473 over 10471, the damaged state of the former compared with the excellent preservation of all that we have of the latter, the careful trimming of one edge as opposed to the careless tearing of the other, which, at the same time, allowed plenty of overlap—all these points are consistent with this reconstruction. But it is only a guess.



Hippopotamus in blue faïence (Brit. Mus. No. 36346).

Scale: c. $\frac{1}{3}$.

THREE HIPPOPOTAMUS-FIGURES OF THE MIDDLE KINGDOM

By H. R. HALL

With Plates xxii and xxiii.

The three hippopotamus-figures shown in Plates xxii and xxiii are among the finest treasures of the British Museum in faïence. They are of the Middle Kingdom, and presumably of the Eleventh—Twelfth Dynasty (if No. 36346 be not even older), but nothing is known of their provenance except that both are said to have come from Thebes, no doubt from Dirâc abu'l Nagâ. No. 35004 was bought from the late Rev. Greville Chester in 1882, No. 36346 was acquired in 1902, No. 22880 in 1891. None has till now been published.

The first (No. 35004) shows the hippopotamus at rest, or at any rate peacefully inclined, the second (No. 36346) shows him alert and roaring. Both are admirable representations of the animal, showing his heavy jowl and the characteristic pig's eyes and little ears with remarkable fidelity.

No. 35004 differs from the other in being ornamented on the surface (in a manner common on these Twelfth Dynasty figures) with representations of the water-lilies amid which he may be imagined to be standing. Over the forehead and back of the head is a flower; on the back are the stalks and bilobed fronds of the plant, on the sides and buttocks are again the petalled flowers. On the face, however, the markings are intended merely to accentuate the features: thus on the broad muzzle beneath the eyes are spots representing the bristly hairs that grow there. The legs of this figure are unluckily broken off. It is of a fine blue, somewhat discoloured and greenish in parts; the drawing of course in brownish-black.

No. 36346 is made of a harder faïence, in a lighter colour, which has faded all over to a uniform pale blue. There is no drawing of water-plants or features on it: even the eyes are not indicated in another colour. But the inside of the mouth is red.

The animal is shown just rising from the ground as if suddenly surprised, and roaring, with its head lifted and turned towards the spectator. The rear limbs are still lying at rest, and the body half-raised on the fore-legs: the off fore-leg is broken. The mouth, wide open, is, as has been said, all red within: a cavern in which are in the upper jaw four, in the lower five, holes for the insertion of peg-like teeth of another material, that have disappeared. It is an unusual piece, and is one of the finest Egyptian representations of a hippopotamus that exists. I think, too, that it is possibly, judging by the faïence and its general appearance, the oldest figure of the kind known. Mr. H. G. Evers tells me that he would date it to about the time of Amenemmes II, but personally I should have been inclined to date it to the Eleventh Dynasty, if not before.

This characteristic attitude of the hippopotamus was evidently often represented. We find it also in the figure formerly in the Hilton Price Collection, illustrated by HENRY WALLIS, *Egyptian Ceramic Art (Macgregor Collection)*, Fig. 7, p. 4, which is however adorned with lilies like No. 35004 and has ornamental spot and zigzag bands upon

it. This was republished in the *Burlington Fine Arts Club Exhibition Catalogue*, 1922 (Pl. xxxvii, p. 56), with another larger and finer example also then in the Macgregor Collection, with ornamentation in deep manganese violet of lily flowers and leaves, rosettes, and even a dragon-fly. No. 35004 may well be compared with H. WALLIS, *op. cit.*, Pl. 1, also formerly in the Macgregor Collection, but somewhat damaged. The hippopotamus at Cairo figured by H. WALLIS, *op. cit.*, Fig. 5, has its head turned to its right, as also has the third British Museum hippopotamus, No. 22880 (Pl. xxiii, *a*), which is a good deal smaller than the others described. It also has lilies painted in manganese brown-black glaze on its back, but they are rather faded, while its blue ground-colour is brilliant. The damaged Macgregor example is of a magnificent deep blue; that of another Cairo specimen (H. WALLIS, *op. cit.*, Fig. 6=*Egyptian Ceramic Art*, II (1900), Pl. 1) is also of a fine, but much paler blue. Its head is not very well modelled.

Berlin possesses a fine green specimen (No. 10724) on which are represented flowers, buds, a butterfly, and even a flying bird. Berlin No. 13890 has the jaws and throat open; Nos. 13891 and 13892 are both "young" (*Ausführ. Verzeichnis*, 1899, 106). And Dr. Scharff kindly informs me that there are two more examples at Berlin, Nos. 15258 and 20601, the first blue green, the second "weisslich" (presumably faded pale blue), both without plants painted on them and "ziemlich mässig in der Durchbildung." The second came from the Martyn Kennard Collection. There are also very fine examples in the Louvre. But in spite of their comparative deficiency in colour (and the leglessness of No. 35004), the two larger British Museum specimens are probably the finest of all their kind as representations of the animal. The measurements of the three are: No. 35004: L. $7\frac{1}{2}$ ins. (19 cm.); H. $3\frac{1}{2}$ ins. (8.8 cm.). No. 36346: L. $6\frac{1}{2}$ ins. (16.5 cm.); H. 6 ins. (15.2 cm.). No. 22880: L. $1\frac{3}{4}$ in. (4.4 cm.); H. $\frac{3}{4}$ in. (1.85 cm.).



a.



b.

a. Hippopotamus in blue faience (Brit. Mus. No. 22880).

Scale c. 1.

b. Hippopotamus in blue faience (Brit. Mus. No. 35004).

Scale: c. 1.

THE FAMILY LETTERS OF PANISKOS

By J. G. WINTER (University of Michigan)

With Plates xxiv—xxvi.

The following letters, which are here published for the first time¹, came from Gerzah, the ancient Philadelphia, in the Fayyûm, and were purchased by the University of Michigan in 1923. They belong to the latter part of the third century or the beginning of the fourth and form part of a family archive representing the correspondence of a certain Paniskos with Ploutogenia, his wife, and Aion, his brother, as well as of Ploutogenia with her mother Heliodora. Ploutogenia's letter to her mother, written in Alexandria (1362), is in a fairly large, easily flowing cursive which may have been her own, but it is much more likely to have been that of a well-practised letter-writer to whom she dictated. Paniskos' letters, too, seem to have been dictated. This would explain the error of Protogenia for Ploutogenia in 1369, 1—an unpardonable mistake if the husband were himself the writer—and would account also for the spelling of his daughter's name *Ιλιοδωρα* for *Ηλιοδωρα* in the same letter (1369, 27). The style of writing, moreover, varies noticeably in his letters. The use of flourishes and the marked separation of words in 1367 set it apart from the rest palaeographically; 1364 and 1369 show individual characteristics which separate them from each other as well as from the others in the group, but the person who wrote 1365 may also have written 1366 and 1368.

The special value of a group of family letters lies in the fact that they reveal more completely and distinctly than unrelated individual letters can ever do the character of both writers and recipients. An interesting illustration of this may be found in the well-known family archives in *P. Fay.* 110–123 and *B.G.U.*, iv, 1203–1209. A letter from a husband to his wife may be filled with the common concerns which the papyri have made abundantly familiar to us—the details of petty business, various wants, anxieties, commissions and the like—and as such it has a value which has been recognized by students of history and philology. When, however, we know not only the husband's letter but also his wife's reaction to it we are aware of an added element of humanity. Both husband and wife then stand forth in a new light because we know the one not only directly through his own utterances but also indirectly through the mood of the other.

The chief members of this Greek family reveal themselves, and are revealed, with unusual distinctness. First, although perhaps not foremost in the domestic economy, is Paniskos, the husband of Ploutogenia. All his letters seem to have been written during his stay in Upper Egypt, and at least three of them are in close sequence (1367, 1365, 1364). The first of these, 1367, was written at Koptos, the modern *Ḳuft*, an important trading-centre below Thebes on the Nile². This letter I regard as the earliest because in

¹ The writer acknowledges with thanks the help he has received from Mr. H. I. Bell.

² For Koptos see W. SCHUBART, *Ägypten von Alexander dem Grossen bis auf Mohammed* (Berlin, 1922), 68, 320. An interesting picture of its trade in armour is afforded by a letter to the strategus Apollonius in the time of Trajan, *P. Giss.* (P. M. Meyer) I, 47 = WILCKEN, *Chrestomathie*, no. 326 = SCHUBART, *Ein Jahrtausend am Nil* (2nd edition, Berlin, 1923), no. 53 (translation).

it Paniskos takes particular pains to inform his wife where he is (1367, 7 ff.), assumes that she will come to him as soon as he sends for her (1367, 17 ff.)—an assumption which proved fallacious—and bids her in greater detail than elsewhere to bring with her an assortment of food, weapons, and all his clothing. He even adds the prudent counsel: “bring your gold ornaments when you come but do not wear them on the boat” (1367, 31–33). Then, too, there is no reference here to a previous letter and none of the natural vexation which her conduct inspires in 1364 and 1365. From his references to various pieces of armour which he has left behind (1364, 16 ff.; 1365, 11, 13; 1367, 24 ff.) and to his colleagues and the prefect “across the river” (1369, 17 ff.) one would conclude that he is a soldier in Upper Egypt, although it seems strange that he should have left so much of his kit in the Fayyûm. He may, of course, be a small merchant engaged in the armour-trade¹. His wife and her mother appear to be settled on small farms at Philadelphia.

We think of him as a man approaching, or in, the middle years, frank in thought and speech, and taught by trial to preserve a fair amount of philosophic calm. When Ploutogenia pays no heed to his parting injunction about going to her home (1364, 3 ff.) he feels somewhat helplessly grieved about it, remarking rather grimly that he is familiar with the excuse “mother does this” (1364, 7). He wants her to come to him but knows that he cannot compel her (1364, 10), although he makes it sufficiently plain that she might write, if not about the journey then at least about herself (1364, 14, 23 ff.; 1365, 6 ff.). He is solicitous for her repute (1364, 16) and safety (1367, 32 f.), and sends her money (1364, 26; 1366, 10; 1369, 10) and wool (1366, 6) for her own use. Of his daughter Heliodora, who seems to be his only child—certainly the only one specifically mentioned as such—he seems genuinely fond, not only remembering her constantly in his greetings (1365, 2, 5, 23; 1366, 2; 1367, 2 and *verso* 1) and sending her money for making anklets (1366, 10) but also recommending her explicitly to the care of Ploutogenia (1366, 3) and of Aion, his brother (1368, 6). Even the mother-in-law, though she seems to have exercised in fact the rôle commonly found in fiction (1364, 7, 23; *cf.* 1362, 6), shares his salutations (1364, 20; 1365, 24; 1366, 19) in a manner which bears witness to the fine solidarity of family life in ancient Egypt. Such salutations are, to be sure, largely a formula of the period, but in the case of Paniskos they seem to be grounded in sincerity and goodwill. That he is thoughtful of the members of the family is further shown by his desire that Nonnos should travel in the company of good men when he journeys to Koptos (1367, 28; *cf.* 1366, margin 2).

In Ploutogenia we find traits which tend to increase our regard for Paniskos. She has independence, resoluteness, and, on occasion, the gift of silence—admirable qualities when viewed objectively but somewhat irritating when one is at Koptos and expects compliance, consideration, and, above all, replies to repeated letters. She has the habit of doing as she pleases (1364, 5) and justifying her course by an excuse whose novelty no longer impresses Paniskos (1364, 7). She certainly has no intention of joining him at Koptos and does not answer his questions on that subject (1364, 9; 1365, 6 ff.), and even disregards the unusual plea made by the letter-carrier (1364, 21 ff.). From a postscript in 1365, 26, and perhaps from 1365, 14, it appears that she did write in regard to armour. To her mother she writes with singular force and directness. After a stay of eight months in Alexandria, during which the daughter has had no letter, she remarks sharply, “so you regard me again not as your daughter but as your enemy” (1362, 4 ff.), and

¹ The presence of troops in the Thebais in Diocletian's time was caused by the insecurity of the southern frontier (*cf.* WILCKEN, *Grundzuge*, 30, 68; SCHUBART, *Ägypten*, 347).

[illegible]

proceeds at once to give directions about pots and pans. Competent, with a will of her own and some acerbity of temper, she doubtless dominated the family circle.

Ploutogenia's daughter Heliodora, named after her maternal grandmother, seems to be still a child but old enough to tend cattle if 1368, 11 refers to her. Paniskos sends her money to be turned into anklets (1366, 10) and is solicitous for her welfare (1366, 3; 1368, 6). Although she seems to have been the only child the family circle is not small. We meet a sister of Ploutogenia whose marriage is alluded to in 1362, 16 and the same letter carries salutations to the elder Heliodora's children (1362, 18). At Koptos Ploutogenia has a sister who has children, as well as brothers (1364, 12; 1367, 12), of whom Hermias alone is mentioned by name (1367, *verso* 2; 1369, 17), doubtless because he is journeying with Paniskos. Paniskos has a brother named Aion (1366, 5) to whom he writes 1368. Besides these there are others whose degree of relationship is not mentioned: Ata or Atat, who may be an Egyptian neighbour (1362, 9), Papylion, whose armour is twice requested by Paniskos (1365, 13; 1367, 26), Nonnos, who has children and is apparently planning a journey to Koptos (1366, 20; 1367, 30), Sarapion (1366, 20), Cornelius (1368, 22), and finally Anilla (1368, 25).

I.

Paniskos to Ploutogenia, his wife.

Inventory number 1367. The papyrus measures 24.7 cm. by 11 cm. and is of a medium-brown colour. The writing is on the *recto* in a large, well-practised hand characterized by sweeping strokes in certain letters, especially alpha and kappa, and by a marked separation of words.

The contents, as has been said, seem to indicate that this letter is the first of those sent to Ploutogenia from Upper Egypt. It will be observed that Paniskos takes particular pains to inform his wife where he is (lines 7-8), assumes that she will come to him as soon as he sends for her (17 ff.), and tells her to bring with her wool, olives, honey, a shield, helmet, lances, all his clothing, her own jewelry, and the outfit of Papylion.

- 1 Πανίσκο[ς] τῇ σοιμβ[ί]φ μου
Πλουτογενία μητρὶ τῆς θυγατρὸς
μου πλίστα χαίρειν.
πρὸ μὲν εὐχομέ σοι τὴν ὀλοκληρία[ν]
5 καθ' ἐκάστην ἡμέραν παρὰ τοῖς
θεοῖς πα^{σι}[[τρ]]. γινώσκειν σε οὖν
θέλω, ἀδελφή, ὅτι ἐν Κόπτῳ
αἰ[[ε]]μίναμεν ἐν γυῖς τῆς ἀδελφῆς
[[μου]] σου καὶ τῶν τέκνων αὐτῆς
10 ὅπως μὴ λυπηθῇς ἐρχομένη
ἐν τῇ Κόπτῳ. εἰσὶ γὰρ ἐνθάδε
οἱ ἀδελφοί σου, ὅπερ καὶ σὺ
πάντως βούλῃ αὐτὴν ἀσπά-
σαστε αὐτὴν πολλά. τοῖς θεοῖς
15 εὐχετ[ε] καθ' ἡμέραν βουλομένη
σε ἀσπάζε[σ]θαι μετὰ τῆς μητρὸς
σου. δ[ε]ξαμ[έ]νη οὖν μου τὰ γράμ[μα] —

- τα ταῦτα ποιήσόν σου τὰ χέρα
 ὅπως ἐὰν πέμψω ἐπὶ σὲν
 20 ταχέως ἔλθης. καὶ ἔνεγ'κον
 ἐρχομένη ποκάρια ἐριδίῳ
 δέκα, ἐλεῶν κεράμια ἕξ,
 στά[[υ]]γματος κεράμια τέσσερα,
 καὶ τὸ ὄπλον μου τὸ κενὸν μόνον,
 25 τὸ κασίδιόν μου. φέρε τὰ λόγχιά
 μου. φέρε καὶ τὰ τοῦ Παπυλίου
 νος σκεύη. ἐὰν εὔρητε εὐκερί-
 αν μετὰ ἀνθρώπων καλῶν
 δεῦτε ἐρχέστω μεθ' ἡμῶν
 30 Νόννος. ἔνεγ'κον ἡμῶν πάν-
 τα τὰ ἡμάτια ἐρχομένη. ἔνεγ'κον
 ἐρχομένη σου τὰ χρυσία ἀλλὰ
 (continued in one line in the left margin)
 μὴ αὐτὰ φορέσης ἐν τῷ πλο[ί]ῳ.

Verso:

- 1 ἀσπάζομε τὴν κυρίαν μου θυγατέραν Ἡλιοδώραν. ἀσπάζετε ὑμᾶς
 2 Ἑρμίας.
 3 ἀπόδ(ος) τῇ σοιμβίῳ μου καὶ Χτῇ θυγατρὶ μου π(αρὰ) Πανίσκου πατρ[ός].

TRANSLATION.

Paniskos to my wife Ploutogenia the mother of my daughter, heartiest greetings. First of all I pray daily for your prosperity in the presence of all the gods. I would have you know then, sister, that we are in Koptos near your sister and her children, that you may not be distressed when you come to Koptos. For your brothers are here, and which no doubt you yourself like to send her many greetings. She prays to the gods daily desiring to salute you and your mother. So when you have received this letter of mine make your necessary preparations to come quickly if I send for you. And when you come bring ten shearings of wool, six jars of olives, four jars of distilled honey, and my shield, only my new one, (and) my helmet. Bring also my lances. Bring also the outfit of Papylion. If you find an opportunity, let Nonnos come here with us in the company of good men. Bring all our clothes when you come. When you come bring your gold ornaments but do not wear them on the boat.

Verso: I salute my dear daughter Heliodora. Hermias salutes you.

(Address): Deliver to my wife and daughter, from Paniskos her father.

NOTES.

2. The daughter's name is Heliodora; cf. the address and 1366, 2.
 4. πάντων was inadvertently omitted from the usual formula.
 5. In 1365, 6 and 1368, 3 we find τῷ κυρίῳ θεῷ. 1367 is anterior to 1365—the place of 1368 in the series cannot be determined although it seems to follow 1366 (cf. line 5)—and the change from the pagan to the Christian formula may indicate conversion. It is not improbable, however, that 1367 may have been composed during some phase of

Diocletian's persecution, when prudence or other considerations might dictate the pagan formula, and that when the immediate danger was past the Christian formula once more emerged in the subsequent letters.

6. In $\pi\acute{\alpha}\sigma\iota$ the letters $\sigma\iota$ are written above the cancelled $\tau\rho$; the scribe evidently began to write $\pi\alpha\tau\rho\acute{\omega}\iota\varsigma$.

7. $\acute{\alpha}\delta\epsilon\lambda\phi\acute{\eta}$, as often in the papyri = wife.

8. $\epsilon\mu\iota\nu\alpha\mu\epsilon\nu$ was corrected to $\alpha\iota\mu\iota\nu\alpha\mu\epsilon\nu$ (= $\acute{\epsilon}\mu\epsilon\acute{\iota}\nu\alpha\mu\epsilon\nu$) by crossing out ϵ and adding $\alpha\iota$ in the left margin, where it divides the word $\phi\omicron\rho\epsilon\ \sigma\eta\varsigma$.

13. $\alpha\upsilon\tau\eta\nu = \alpha\upsilon\tau\eta$; $\acute{\alpha}\sigma\pi\acute{\alpha}\sigma\alpha\sigma\tau\epsilon = \acute{\alpha}\sigma\pi\acute{\alpha}\sigma\alpha\sigma\theta\epsilon = \acute{\alpha}\sigma\pi\acute{\alpha}\sigma\alpha\sigma\theta\alpha\iota$; cf. $\acute{\epsilon}\rho\chi\acute{\epsilon}\sigma\tau\omega$ (= $\acute{\epsilon}\rho\chi\acute{\epsilon}\sigma\theta\omega$), line 29. The thought behind the crude expression seems to be: I am writing to you that we are staying at Koptos near your sister (for your $\acute{\alpha}\delta\epsilon\lambda\phi\omicron\acute{\iota}$, i.e., your brothers and sister, are here) because I know that on learning this you will want to send her many greetings. [I am indebted for this interpretation to Mr. H. I. Bell.]

16. The mother's name is Heliodora; cf. 1364, 20.

17. The edge seems intact and it appears that the division into $\gamma\rho\alpha\mu\iota(18)\mu\alpha\tau\alpha$ was intended but only $\tau\alpha$ was actually written.

18. $\tau\alpha\chi\epsilon\rho\alpha$ is clear enough palaeographically but is meaningless as it stands. The edge is probably intact as far as the writing is concerned, and the flourish of the α would seem to indicate the end of the word. $\sigma\grave{\upsilon}\ \tau\alpha\chi\acute{\upsilon}\tau\epsilon\rho\alpha$ had first occurred to me as a solution, but that involves attributing two errors to the scribe and leaves no force to $\tau\alpha\chi\acute{\epsilon}\omega\varsigma$ below. It is, I believe, fairly certain that $\pi\omicron\acute{\iota}\eta\sigma\acute{\omicron}\nu\ \sigma\omicron\upsilon\ \tau\grave{\alpha}\ \chi\rho\acute{\epsilon}\alpha$ was meant; the metathesis is a rather natural one, and the context requires the idea of making necessary preparation.

19. $\sigma\grave{\epsilon}\nu = \sigma\grave{\epsilon}$.

20. For γ' , cf. lines 30, 31, and 1364, 3. WILCKEN, *Grundzüge*, xlvii.

23. $\sigma\tau\alpha\upsilon\gamma\mu\alpha\tau\omicron\varsigma$ was corrected to $\sigma\tau\acute{\alpha}\gamma\mu\alpha\tau\omicron\varsigma$.

24. $\kappa\epsilon\nu\acute{\omicron}\nu = \kappa\alpha\iota\nu\acute{\omicron}\nu$.

25. $\kappa\alpha\sigma\acute{\iota}\delta\acute{\iota}\omicron\nu$, Lat. *cassis*. This form of the word does not occur in PREISIGKE'S *Wörterbuch*. Cf. 1364, 17; 1365, 11.

26. Papyllion is also mentioned in 1365, 13. The name does not appear in PREISIGKE'S *Namenbuch*.

27. $\epsilon\upsilon\kappa\epsilon\rho\acute{\iota}\alpha\nu = \epsilon\upsilon\kappa\alpha\iota\rho\acute{\iota}\alpha\nu$.

29. $\acute{\epsilon}\rho\chi\acute{\epsilon}\sigma\tau\omega$, cf. line 13. The θ of $\mu\epsilon\theta'$ was corrected from τ .

30. Nonnos reappears in 1366, 20.

33. $\phi\omicron\rho\acute{\omicron}\sigma\eta\varsigma$, cf. note on line 8.

Verso.

2. For Hermias see also 1369, 17. This brother of Ploutogenia was probably accompanying Paniskos and that fact may account for the use of the plural in line 8.

3. Pap. $\alpha\pi\omicron\delta''$ and π' .

II.

Paniskos to his wife and daughter.

Inventory number 1365. This papyrus, measuring 9.5 cm. by 3.5 cm., is in less satisfactory condition than the preceding one. The colour is a medium to dark brown. The writing is on the *recto*, slightly larger and cruder than that of 1367, and is certainly by a different hand; but it, too, is the work of a practised scribe. The rather ungainly appearance is caused in part by the fact that the writer found it necessary to dip his

pen frequently and wrote heavy black letters soon followed by lighter ones. Pen or ink or both rather than the writer himself seem responsible for the lack of firmness and even distinction which he seems capable of achieving.

The reference to this as the second letter (line 7), the grim comment on his wife's failure to come, and the repetition of the request for his new shield and the outfit of Papyllion make its place in the series fairly certain. Line 21 as well as the repetition alluded to seem to imply confidence that Ploutogenia will still come to Koptos.

- 1 Παν[ι]σκος τῇ συμβίῳ κ[α]ῖ
 τῇ θυγατρὶ πολλὰ χαίρειν.
 πρὸ μὲν πάντων εὐχομα[ι]
 σε ὀλόκληρόν σε ἀπολαβῖν
 5 μετὰ τῆς θυγατρός μου παρὰ
 τῷ κυρίῳ θεῷ. ἤδη δευτέ-
 ραν σοι ἐπιστο[λ]ήν γρ[α]φῶ
 ἵνα ἔλθῃς πρὸς ἐμέ, καὶ οὐ-
 κ ἦλθας. ἡ οὖν οὐ θέλεις ἐλθῖ[ν]
 10 ἀντίγραφόν μοι. ἔνεγκόν μου
 τὸ ὄπλον τὸ κεν[ὸν καὶ τ]ὸ κασί-
 διν καὶ τὰ πέν[τε λόγχια] καὶ
 τὰ τοῦ Παπυλ[ίωνος] σκεύη. κ[α]ῖ ἔ-
 γραψά[ς] μοι ὅτι[ι] Πα[ν]-
 15 ἰσκή[.] ὅτι δ[.]
 καὶ σ[οι] ἔδωκα[. Σατυρ]-
 νίνῳ ἵνα σοι[. μὴ ἀ]-
 μελήσῃς οὐδ[.]
 οὖν οἴεσθαι γυν[.].
 20 ὡτων καὶ σο[ν] καὶ ἡμῶν. ἡ
 οὖν ἔχῃς σύνε[ρ]γα ἐνε[γκ]ον αὐ-
 τὰ καὶ τέμν[ε]τε ἐνθάδε.
 ἀσπάζομαι τ[ῇ]ν θυγατέρα[ν]
 μου πολλὰ [κ]αὶ τὴν μητέ-
 25 ραν σου καὶ τ[ο]ὺς φιλοῦντας
 ἡμᾶς κατ' ὄνομα.
 ἐρρωσσοθαί σε εὐχομαι
 Παῦνι κβ.

The following postscript, added in the same hand but in smaller characters, begins in line 26, continues in two lines above the ἐρρωσσοθαί (l. ἐρρωσθαι) formula, and concludes between that and the date of the month. Below the latter the salutations seem to have been resumed.

- 26 κ[α]ῖ ἔγρα-
 27 ψάς μοι ὅτι ἦρκες εἵκοσι[.] ὅπλα
 28 ταμῶν οὐδὲν αὐτῷ[ν] κ[α]τ[ε]
 30 εἵμηνεν Τημνας
 32 [ἀσπά]ζο[μαι] ὑμᾶς[ς].

(The papyrus is broken off here.)

Verso (address):

1 ἀπ(ό)δος τῇ συμβίῳ \times π(α)ρὰ Πανίσ[κου
2 ἐν τῷ Παρ[ίῳ?].

TRANSLATION.

Paniskos to his wife and daughter, many greetings. Before all else I pray before the Lord God that you and my daughter may receive this in good health. I am now writing you a second letter that you may come to me, and you have not come. If, then, you do not wish to come write me a reply. Bring my shield, the new one, and my helmet and my five lances and the outfit of Papyllion. And you wrote me that...to Paniskos...that...and I gave you...to Saturninus in order that...to you...do not neglect it then...accordingly.... So if you have the trimmings bring them and cut them here. I salute my daughter often and your mother and those who love us, by name. I pray for your welfare. Pauni 22.

(Postscript): You wrote, "you took twenty...shields...none of them." Temnas has remained below. I salute you.

Verso (address): Deliver to my wife, from Paniskos, in the house of Par(ios?).

NOTES.

1. In 1367, 1 and address, the spelling *σοιμβίῳ* is used; 1366, 1 and address, agrees with the present letter in having *τῇ συμβίῳ*.
2. For the daughter, *cf.* 1367, note on line 2.
4. The repetition of pronouns is not uncommon; *cf.* MAYSER, *Gram.*, II, 63.
5. Pap. *θυγατρο*.
6. On *τῷ κυρίῳ θεῷ*, *cf.* 1367, 5. The second *ε* of *δευτέραν* seems to be a correction from another letter or a heavy retracing of *ε* itself.
11. *κενὸν* = *καινὸν*; *cf.* 1367, 24.
13. There is a similar reference to Papyllion in 1367, 26. Near the end of lines 12 and 13 is a patch in the same hand but out of place here. It contains the letters (12) *μαδ*, followed by *καὶ* which is in place; (13) *α*, again followed by *καὶ* which is also in place.
16. The lower half of the papyrus, comprising lines 16 ff., was glued to the upper half before its purchase. There can be no doubt that the two pieces belong to the same letter but one or more lines may be lost.
17. The name was probably *Σατυρνίνῳ*.
19. *οἴεαι* is not clear. The doubtful letter certainly looks like *λ*: *τ* is a possibility; *δ* is not.
21. In *P. Oxy.* VII, 1069, 8 (III cent.) and *P. Oxy.* VIII, 1159, 15, 20 (late III), Professor Hunt translates *σύνεργα* by "tools" with a question, and in his note on VIII, 1159, 15 remarks that the word "apparently means weaving implements." This interpretation he bases on a passage (not conclusive) in Damascenus Studita, *Homil.* 25. In the present letter the connexion clearly points to cloth of some sort used for the chiton (*cf.* 1366, 11), and that may well be the meaning of the word in the Oxyrhynchus papyri also.
24. For the mother Heliodora, *cf.* 1367, 16.
26. After *κατ' ὄνομα* and the closing formula of *ἐρρῶσθαι* (l. *ἐρρῶσθαι*), with a large *ε*, had been finished, a postscript was crowded into the vacant space. This can be seen from the fact that the last two letters of *ταμμόν* were accommodated to the large loop of the *ε* of *ἐρρῶσθαι*, the *ν* being partially enclosed by it.

27. Following *εἴκοσι* the surface of the papyrus is abraded. From the *ο* of *δπλα* there is a rough stroke extending over the word; this is probably not intentional. The large number of shields referred to (20+) would lead one to infer that Paniskos is a merchant rather than a soldier; but the illegibility of part of the postscript makes certainty impossible.

28. *ταμμων* seems to be the reading but it gives no meaning; perhaps a name, [Πο]τάμμων? *κατω*; the first two letters are very uncertain, the *τ* seems fairly sure but the possibility of *λ* cannot be excluded.

30. The name *Τημνας*, or, less probably, *Τηλνας*, is unknown to me.

31. Pauni *κβ* is June 16. The year was not written.

Verso.

1. Pap. *απ'* and *π'*.

Transcript of fragment found with 1365.

With 1365 there came a small fragment, evidently the conclusion of a letter, measuring 7 cm. by 3.1 cm., of the same colour, texture, and precisely the same writing. But the line in the left margin shows that it does not belong to 1365, whose left margin is intact. Nor does the fragment fit any other of the Paniskos group.

(The top is gone.)

1]μη . [
]ρατη[
]μαι ἀπ[
]λεν συν[
 5]καὶ οὐ[
]βίου κα[

(Here the papyrus is broken off.)

One line in the left margin:

ἐρρώσ]θαί σε εὐχομαι Φαρμ[οῦθι?

III.

Paniskos to Ploutogenia.

Inventory number 1364 is a medium-brown papyrus, 25 cm. by 13 cm., with an upper margin of about 1.7 cm. The left margin, where it is preserved, is about 2 cm. It is badly broken across the centre (lines 12, 13). The writing is on the *recto* in very black ink in a hand which is fluent but rather careless: the script becomes somewhat smaller and more crowded towards the end.

In this letter from Koptos Paniskos again refers to his wife's journey to join him. He seems to have abandoned hope, however, and in speaking of his armour once more it will be observed that he uses *πέμψον* and not *ἐνεγκον* as before. His apparent vexation with her conduct and his allusion to her mother are natural enough under the circumstances, and have a directness which breaks the barriers of centuries. Paniskos and his wife, two obscure little people of the third century, win new reality and become eternally human.

The verbal message of the letter-carrier is an unusually interesting example of quotation within quotation.

- 1 Πανίσκος Π[λο]υτογενίαι τῇ
 συμβίῳ χαίρειν.
 παρήγ' γειλά σοι ἐξερχόμενος ὅτι
 μὴ ἀπέλθης εἰς τὴν οἰκίαν σου
 5 καὶ ἀπῆλθες πάντως. εἴ τι θέλεις
 ποιεῖς, λόγην μου μὴ ἔχουσιν.
 ἀλλὰ οἶδα ὅτι ἡ μήτηρ μου ταῦτα ποι-
 εῖ. εἰδοῦ τρεῖς ἐπιστολὰς ἔπεμψά σοι
 καὶ οὐδεμίαν μοι ἔγραψας. εἰ μὲν
 10 [ο]ὐ θέλεις ἀναβῆναι πρὸς ἐμέ, οὐδεὶς
 [σε ἀν]αγκάζ[ει]. ταύτ[α]ς τὰς ἐπιστολὰς
 [ἔγραψ]ά σοι ἐπὶ ἡ ἀδ[ε]λφῇ [σο]υ ἀναγκ[ά]-
 [ζει με] ἐνθάδε γράψαι. ἐπ[ὶ] δ[έ] σ[ο]ι οὐ
 [.]ν σοι γράψαι περὶ τούτου, ἀλλὰ
 15 [γράψ]ον οὖν περὶ σοῦ. ἀλλὰ ἤκουσα τὰ
 [μὴ] ἀνῆκοντά σοι. πέμψον μοι τὸ
 [κασ]ίδιν μου καὶ τὸ ὀπλάριν καὶ τὰ
 [πέ]ντε λόγχια καὶ τὸ λωρίκιν μου
 [κ]αὶ τὸ βάλτιν μου. ἀσπάζομαι τὴν
 20 [μη]τέρα σου Ἡλιοδώραν. εἰπέν
 [μοι] ἀναβὰς πρὸς ἐμὲ ὁ ἐπιστολοφόρος
 [ὅτι] ὅτε ἔμελλον ἐξελθεῖν, εἶπον τῇ
 [γυνα]ικὶ καὶ τῇ μητρὶ αὐτῆς ὅτι δότε
 [μοι ἐ]πιστολὴν ἀπεινεγκεῖν τῷ Πανίς-
 25 [κω] καὶ οὐ δεδώκασιν. ἔπεμψά σοι διὰ Ἀν-
 [των]ίου ἀπὸ Ψινέστους τάλαντον ἔν.
 ἐρρώσθαι σε
 εὐχομαι.

Verso (address):

- 1 Πλουτογενίαι τῇ σ[υμβίῳ].

TRANSLATION.

Paniskos to Ploutogenia his wife, greeting. I enjoined you when I left: "do not go off to your home" and yet you went. If you wish anything you do it, without taking account of me. But I know your "mother does this." See, I have sent you three letters and you have not written me one. If you do not wish to come up to me no one compels you. These letters I have written to you because your sister compels me to write from here. But since you do not wish (?) to write about this at least write about yourself. I have heard things that do not become you. Send me my helmet and my shield and my five lances and my breastplate and my belt. I salute your mother Heliodora. The letter-carrier said to me when he came to me: "when I was on the point of departing, I said to your wife and her mother, 'give me a letter to take to Paniskos,' and they did not give it." I have sent you one talent by Antonius from Psinestes. I pray for your welfare.

Verso (address): To Ploutogenia my wife.

NOTES.

2. The word *χαίρειν* stands apart in unusually large letters.
3. *ὅτι*, as often, introduces a direct statement.
6. *λογην* seems certain. The letter following *λ* was apparently traced three times and the result is a large blot. The writer doubtless intended *λόγον*.
L. *ἔχουσα*.
8. The third letter is the present one.
9. The statement about the three letters and no reply is inconsistent with 1365, which is the second letter (*cf.* line 6) and which has in its postscript (ll. 26-7) *ἔγραψάς μοι*. Paniskos either forgot or he means that Ploutogenia had not written specifically about her coming.
12. The reference to Ploutogenia's sister (*cf.* 1367, 8) shows that Paniskos is in Koptos.
ἐπὶ = *ἐπεὶ*.
13. The end of the line is badly damaged. The connexion seems to require "but since you do not wish to write" or "since she said I did not wish to write." The last letter of the line may be *κ*.
15. For the personal pronoun of the second person used as a reflexive after a preposition *cf.* MAYSER, *Gram.*, II, 67.
17. *κασίδιν*, *cf.* 1367, 25; 1365, 11. The *ὀπλάριν* (= *ὀπλάριον*) is the *ὄπλον* of 1367, 24; 1365, 11.
18. The *λόγχια* are mentioned in 1367, 25 and doubtless stood in the lacuna of 1365, 12. The *λωρίκιν* (= *λωρίκιον* = Latin *lorica*) and the *βάλτιν* (= *βάλτιον* = Latin *balteus*) are not mentioned elsewhere in the correspondence. *βάλτιν* does not appear in PREISIGKE, *Wörterbuch*, or the new L. and S.; *λόγχια* is not cited in Preisigke in this form, and *λωρίκιν* is not mentioned. The words are not listed in CALDERINI-MONDINI, *Repertorio*.
26. *Ψιρέστους* or *Ψιλέστους*, the former more probably.

IV.

Paniskos to his wife.

Inventory number 1366 is a dark-brown papyrus written in very black ink on the *recto*. It is 10.8 cm. by 11.2 cm., perhaps by the same hand that wrote 1365 and 1368. The writing is smaller, however, than in either of these and much more carefully done but shows the same ductus.

Its place in the series cannot be determined but the reference to his return home (line 13) would imply that it follows the preceding letters in point of time. The allusion to cattle both here (line 8) and in 1362, 13 would indicate that the family had small holdings in the Fayyûm.

- 1 Πανίσκος τῇ συμβ[ί]ο]ν πολλὰ χαίρειν.
ἀσπάζομαι Ἑλιοδ[ω]ρ[αν] τὴν θυγα-
τέραν μου πολλά, καὶ [πρ]όσεχε αὐτῇ. θέ-
λω ἰδῖν ἢ τινος χρίαν ἔχῃς. ἔγραψα
- 5 Ἀιδῶνι καὶ ἢ τι ἀφήκῃς εἰς Ἑλίου π(όλιν) πέμ-
ψον ἐπ' αὐτά. καὶ ἀφήκα τὰ ἐρίδια
σεαυτῇ ἵνα ἢ τι θέλῃς ἀνηλώσης σε-
αυτῇ. καὶ πρόσεχε καὶ σου τοῖς κτήσι,

[illegible]



καὶ τὰ τρία ὀλοκόττινα ποίησον αὐ-
 10 τὰ ποδοψέλα τῇ θυγατρὶ μου, καὶ ἐτοι-
 μασον τὰ σύνεργα τοῦ κιθωνίου σου
 καὶ τοῦ εἵματιού. καὶ ἤν ὁ θεὸς θέλει
 καὶ ἔλθω βάλλω ἐκρ. αἰχμαστ. καὶ ἐτύ-
 μασον τὸ δερματῖκ[ιν] μου, καὶ ἡ τι
 15 [θ]έλουσιν ἀκολουθεῖν αὐ[τῷ] τοῖς. γείνωσ-
 [κε ο]ὔν ὅτι ὡς ἀδε[λφός σ]οι γράφω οὐκ ὡς
 [. . .].. [σο]υ. [ἐρρ]ῶσ[θ]αί σε εὖχο-
 [μαι

(The papyrus is broken off here.)

Continued in the left margin in two lines:

1 ἀσπάζομα(ι) τὴν μητέραν σο[υ] πολ[λὰ]
 καὶ Νόννευ σὺν τέκνοις καὶ Σαραπίων[α].

Verso:

1 ἀπ(όδος) τῇ συμ-  πα(ρὰ) Πανίσκω
 2 βίου  ἐν τῷ Μοψαρίου.

TRANSLATION.

Paniskos to his wife, many greetings. I salute often Heliadora my daughter. And do you attend to her. I wish to know if you have need of anything. I wrote to Aion; and if you have dispatched anything to Heliopolis send for it. I have also sent you wool for yourself in order that if you wish you may use it for yourself. And attend also to your cattle. And as for the three holokottina, make anklets of them for my daughter, and prepare the accessories of your chiton and himation. And if God wills and I come, I (shall) strike (or pay).... Make ready also my cloak with a hood; and if they wish anything follow them. Know that I write to you as a brother and not as your.... I pray for your health. I salute your mother often, also Nonnos with his children and Sarapion.

Verso (address): Deliver to my wife Ploutogenia, from Paniskos in the house of Mopsarios.

NOTES.

1. Enough is left of the final *υ* to make *συμβίου* certain; cf. the address and 1365, 1.

4. L. *χρεῖαν*.

5. Aion is Paniskos' brother to whom 1368 is addressed.

Pap. *ηλιουπ*.

9. *ὀλοκόττινα* (the masculine form of the word occurs elsewhere, cf. CALDERINI-MONDI, *Repertorio*) are the *aurei* of Diocletian and *solidi* of Constantine. In a papyrus which cannot be far from contemporary with the present letter, *P. Oxy.* XIV, 1653 (306 A.D.), the average weight of the holokottinos is 4½ gr. of gold. Under Constantine the weight was fixed at 4 gr. See GRENFELL and HUNT, *ad loc.*, and on *P. Oxy.* XII, 1430 (324 A.D.). Professor H. A. Sanders discusses the history and meaning of the word in *University of Michigan Studies*, XXI, 22 ff. (modifying his earlier views in *Philological Quarterly*, III, 161 ff.). A gift of three gold holokottinoi by Paniskos would seem to indicate a degree of prosperity, and this is borne out by the reference to Ploutogenia's gold ornaments in 1367, 32.

10. *ποδοψέλα* I have not found elsewhere but it is the equivalent of *ποδὸς ψέλλια*. The phraseology implies that the coins are themselves to be used to form a bangle.

11. For *σύνεργα*, cf. 1365, 21. The *ο* of *σου* was retraced.

12. *ὁ θεὸς* implies that Paniskos is a Christian; cf. 1367, line 5, note.

13. I have found no solution for *εκρ.αχαου* or *εκι.αχουν*.

14. *δερματίκιν* was probably written; cf. PREISIGKE, *Wörterbuch*, and the new revised Liddell and Scott.

17. The first vestige of a letter resembles the top of *κ*, *υ*, or *χ*. Neither *ἐχθρός*, cf. 1362, 7, nor *δεσπότης*, although affording a satisfactory meaning, seems to suit both the space and the extant traces of letters.

Margin 2. L. *Νόννον*.

Verso:

1. Pap. *απ'* and *πα'*. L. *Πανίσκου*.

2. Cf. 1365, *verso* 2.

V.

Paniskos to Aion his brother.

Inventory number 1368 arrived as a rather clumsy composite of three pieces glued together, with the addition of two small fragments of alien origin. The latter I omit here. The lower half of the composite letter measures 11 cm. by 9 cm. and forms the mutilated upper portion of a letter by Paniskos to Aion his brother. The upper part, in two pieces (maximum measurement 9.5 cm. by 9 cm.) badly joined, probably forms the conclusion of the same letter and is so printed here. It is devoted to the customary extended salutations. The whole is so badly damaged that it is impossible to recover much more than the evidence of his regard for his brother and concern for his daughter. The writing is on the *recto*: the papyrus is light-brown.

- 1 [Πανί]σκος [τῷ] Ἀἰῶ[ν]ι ἀδελφ[ῷ] μο[υ] πολ(λ)ὰ χαί(ρειν).
 [πρὸ μὲ]ν πάν[τ]ων εὐχομέ σε [ὅλ]οκλη-
 [ροῦντα] ἀπολ[αβ]ῆν παρὰ τῷ κυρίῳ θεῷ.
 [γινώ]σκιν ὑμᾶς θέ[λ]ω ὅτι θεοῦ θέλον-
 5 [τος ὅλ]οκληροῦμεν. καὶ ἐντέλλομέ σοι
 [πρὸ ὅ]λου, ἀδελφαί, πρόσεχε τῇ θυγα-
 [τρί μου] καὶ ἥ τινος χρίαν ἔχει δὸς αὐτῇ.
 [.] δὲ ἐπιτάξα[τε] αὐτῇ καὶ ἡν
 [.]ση ἡμεῖν. ἀντ[ι]γράφ[α]τέ μοι καὶ
 10 [τῷ Σε]ρήνω ἡν κα[λ]ῶς πράξει καὶ
 [προσέ]χει τοῖς πρόβα[σιν]. ἐπιμέλ[λ]ε[τε]
 [.]δεως ἀλλω[.]ει καὶ ο[. . .]κα
 [.]νο[. . . καλῶ]ς ποιήσ[εις] με
 [.]εχ[.] γί[νωσ]κε
 (Line or lines missing.)
 15 [about 20 letters μ]ητρὶ κα[ὶ . . .]
 [.]οις καὶ [.]ξεν μ[. . .]
 [.]ρησω κἀγὼ [. . . ἀπ]οδιδωμ[. . .]
 [.]ας κ[. . .]3ο[. . .]ε καὶ ὑμέ[ι]ν

[illegible]

[... ἀδ]ελφῶ ἡμῶν [...] ασοειτι καὶ
 20 [μὴ ἀμ]ελήσης. ἀντ[ι]γ[ρ]αφόν μοι περὶ
 [τὴν σ]ωτηρίαν ὑμῶν. ἀσπάζο-
 [μαι ...] ἀν σὺν τέκνοις καὶ Κορινή-
 [λιον σὺν] τέκνις καὶ τὴν σύμβιον αὐ-
 [τοῦ] ον σὺν τέκνοις καὶ τῇ συμ-
 25 [βίῳ καὶ τὴν θυ]γατέραν [μ]ου καὶ Ἀννίλ-
 [αν]. [...]. ἀσπάζομαι
 [.....] πολλὰ καὶ Ἡ[λι]οδώρα[ν]
 [about 23 letters] τέκν[.....]

(The papyrus breaks off here.)

TRANSLATION.

Paniskos to Aion my brother, many greetings. Before all else I pray before our Lord God that you may receive this in prosperity. I wish you to know that, God willing, we are prospering. And I enjoin you, brother, before all else attend to my daughter, and if she has need of anything give it to her...do you order her...and if...to us. Write a reply to me and Serenus if she fares well and attends to the flocks. Take care...please...know...to my (?) mother and...and...repay...and to you...our brother...do not neglect it. Write me then about your health. I salute...with his children and Cornelius with his children and his wife...with children and his wife and my daughter and Anilla.... I salute...often and Heliodora...children.

NOTES.

1. Aion is mentioned in 1366, 5.
3. θεῶ; cf. 1367, 5.
4. The iota of ὅτι was corrected or retraced.
5. με of ὁλοκληροῦμεν was retraced.
6. L. ἀδελφε. For the daughter see 1365, 2; 1367, 2.
9. ση; the first letter may be part of π.
10. Σερήνω; the last letter is very probably but not certainly ω.
13. καλῶ]ς ποιήσε[ις] or ἐποιήσα[...]
18. ὑμε[ι]ν or ὑμε[ι]ς.
19. ασοειτι; the letters probably form the conclusion of a name.
20. The last word in the line was roughly retraced and is very uncertain.
23. L. τέκνοις.
25. Ἀνιλλαν was probably intended; the spelling with νν does not occur in PREISIGKE'S *Namenbuch*.

VI.

Paniskos to his wife Ploutogenia.

Inventory number 1369 is a medium-brown papyrus measuring 24 cm. by 10 cm. There is a left margin of about 2 cm. The upper part is badly damaged and at line 16 the two parts of the letter were pasted together before its arrival. There may be a loss at this point of a line or two. The contents are on the *recto*. The letter was written while Paniskos was still in Koptos or its vicinity. Paniskos writes of various matters:

of the letter given to Dioskoros to carry to Ploutogenia, of a talent which Dioskoros has from Paniskos and which Ploutogenia is to secure, of her brother Hermias who is across the river with the prefect and who has been repeatedly summoned in vain to return to the epanorthotes Achilles, of nineteen colleagues who have returned, apparently from the other side. There was ample room in the concluding line for the inclusion of the year but that, unfortunately for us, was not given. The seal or tie-mark appears on the *verso* but nothing of the address is left. The papyrus has been mended with a strip of alien origin which has a few traces of letters in a different hand.

- 1 Πα[νί]σκος Προτογεν[ι]-
 α[ι τ]ῇ συνβίῳ πλείσ-
 [τ]α χαίρειν.
 γ[ινώ]σκειν σε θέλ[ω]
 5 ὅ[τι ἐπι]στολὴν ἔδω-
 κ[α Διοσ]κόρῳ ὡς αὐτοῦ
 ἐλ[θόντο]ς παρ' ἐμοῦ. εἰ[πισ]-
 το[λήν ν]ῦν δέ σοι γ[ράι]-
 φῳ [ότι] οὐ δέδοκα αὐ-
 10 τῷ [τ]ῷ [τά]λαντον ἀλλὰ
 ἐκ[όμ]ισεν. δέξαι οὖν
 παρ[ὰ τ]ῶν ιδίων αὐ-
 τοῦ τὸ τάλαντον.
 καὶ διεπεμψάμην
 15 ὅτι αὐτοῦ τὴν ἐπιθή-
 [κην] τὰ λα[.]
 λάβης καθὼς προεῖπο[ν].
 ὁ δὲ Ἑρμείας ὁ ἀδελφός
 σου ἐστίν ἐν τῷ πέρ[αν]
 20 μετὰ τοῦ ἐπάρχου. πολ-
 λάκι[ς] φωνήν αὖ[τῷ]
 ἐβά[λομ]εν ἵνα ἔλ[θῃ]
 πρὸς τὸν ἐπανορθωτή(ν)
 Ἀχιλλ[έα] καὶ οὐκ ἦλθεν.
 25 οἱ πλείστοι τῶν κολ[λη]-
 γῶν ἡμῶν ἦλθαν πρὸς
 ἡμᾶ[ς]. ἀ]σπάζομε
 ὑμᾶς, Ἰλιοδώραν μου
 τὴν θυγατέρα μου
 30 καὶ τοὺς ἡμῶν π[άν]-
 τας. Θὼθ ιβ̄.

TRANSLATION.

Paniskos to Protogenia (Ploutogenia) his wife, heartiest greetings. I would have you know that I have given a letter to Dioskoros inasmuch as he was coming from me. I am now writing that I did not give him the talent but he bore it. Accordingly, take it from his possessions. And I sent word that...his deposit. Take it as I told you. Your brother Hermias is across the river with the prefect. We sent him word repeatedly that

he might come to the epanorthotes Achilles, and he has not come. Most of our nineteen colleagues have come to us. I salute you, Heliadora my daughter, and all of our household. Thoth 12.

NOTES.

1. Προτογενία is perfectly legible and can only be the letter-writer's error: it is, I believe, one of the proofs that Paniskos dictated.
8. The second *ν* of *νύν* was retraced.
18. For Hermias see 1367. *verso* 2.
19. *πέραν*; sc. τοῦ ποταμοῦ.
21. I know of no parallel to *φωνὴν ἐβάλομεν* but its meaning is evident. SOPHOCLES, *Lexicon*, cites *βάλλω κραυγὴν*.
23. Pap. *επαγορθωτῆς*. The *επαγορθωτής* is the corrector iuventutis charged with revision of the service lists: cf. PREISIGKE, *Fachwörter*.
24. The name Achilles in a papyrus of Diocletian's time is an interesting reminder of the usurper slain at Alexandria.
25. The numeral *ιθ* was added above, after *τῶν*.
28. For Heliadora see 1367. 2.
29. On the repetition of the pronoun cf. MAYSER, *Gram.*, II. 63.
31. Thoth 12 = Sept. 9.

VII.

Ploutogenia to her mother.

Papyrus number 1362 measures 20 cm. by 12.5 cm. The left margin is from 2 to 2.3 cm.: the upper one about 1.1 cm., and the lower, 7 cm. The colour is light-brown. The writing shows the ease and even elegance of a professional letter-writer.

In this letter, written at Alexandria, Ploutogenia reproaches her mother Heliadora for failure to write during the daughter's eight months stay in the metropolis. Her mood is less conciliatory than that of Paniskos under somewhat similar provocation. This, he might have reflected, is another of those things "mother does" (1364. 7). Ploutogenia's visit cannot of course be explained by 1364. 3-6 since she was then with or near her mother in Philadelphia, as the salutations in that letter show. During her absence she has not forgotten the concerns of life in the Fayyûm. There is nothing in its contents to indicate its position in the archive: Paniskos is not mentioned, and the omission of his name is perfectly natural inasmuch as he too was doubtless away from home. One might have expected a greeting to her daughter Heliadora but Ploutogenia, who is certainly not communicative, merely closes with a general salutation. It is also possible, but rather improbable, that the letter antedates her marriage.

- 1 Πλου[τογένι]α τῇ μητρί μου πολλὰ
χαίρειν.
πρὸ μὲν πάντων εὐχομαί σε ὁλοκληρῖν
παρὶ τῷ κυρίῳ θεῷ. ἡσὴ ὀκτὼ μῆνες
5 ἀφ' ἧς εἰσῆλθα εἰς Ἀλεξάνδριαν οὐδὲ
μίαν μοι ἐπιστολὴν ἔγραψας. πάλι οὖν
οὐκ ἔχεις με ὡς θυγατέραν σου ὡς ἐχθράν
σου. τὰ χαλκώματα τὰ ἔχεις παρὰ σοί,
δὸς αὐτὰ Ἀτατ καὶ σὺ αὐτὰ παρὰ λαβε
10 ἀπ' [α]ντῆς Ἀτα πλήρης. καὶ γράψον

μοι πόσον κέρμα ἔλαβες παρὰ
 Κουπ[ι]νηρι καὶ μὴ ἀμελήσης. πρόσεχε
 τῇ μαχανῇ καὶ τοῖς κτήσεί σου, μὴ
 ὀκνήσης καὶ μὴ θελήσης σκυλῆ-
 15 [ναι]. [ἐὰν] δὲ μέλλῃ
 ἡ θ[υγάτ]ηρ σου γαμῆσαι γράψον μοι
 καὶ ἔρχομαι ἐγώ. ἀσπάζομαί σε
 μετὰ τῶν τέκνων σου. ἀσπάζομαι
 καὶ τοὺς φιλοῦντας ἡμᾶς
 20 κα[τ'] ὄνομα. ἐρρωσθαι ὑμᾶς
 εὖχομαι πολλοῖς
 χρόνοις.

Verso (address):

1 ἀπ(όδος) τῇ μητρὶ μου π(αρά) Χ Πλουτογενία θυγατρί.

TRANSLATION.

Ploutogenia to my mother, many greetings. First of all I pray for your prosperity in the presence of the Lord God. It is eight months since I came to Alexandria and you have not written me a letter. You again consider me then not as your daughter but as your enemy. The bronze vessels which you have by you, give to Atat. and do you take them back filled from Ata herself. And write me how much money you got from Koupiner and do not forget. Attend to your irrigation wheel and your cattle; do not hesitate and do not wish to trouble.... And if your daughter intends to marry write me and I will come. I salute you together with your children. I salute also by name those who love us. I pray for your continued health.

Verso (address): Deliver to my mother, from Ploutogenia her daughter.

NOTES.

1. The mother's name is Heliodora; cf. 1364, 7, 20, 23; 1365, 24.
4. Ploutogenia uses the Christian formula; cf. 1367, 5.
L. εἰσι.
6. L. πάλιν; cf. MAYSER, *Gram.*, I, 240 and GHEDINI, *Lettere cristiane*, 71 with references.
7. ὥς = (ἀλλὰ) ὥς.
8. For τὰ as a relative pronoun cf. MAYSER, II, 59. The ε of ἔχῃς was corrected from τ.
9. Ατατ is followed by a small abrasion which can have contained only the κ of καί. In the following line the name is certainly Ατα. The only reason I can see for the variation lies in the accidental omission of τ before π where Ploutogenia might have slurred it in dictating. PREISIGKE, *Namenbuch*, cites only Ατα. *Ataou = 'Atā, under Arabic names.
10. πλήρης, indeclinable as often after the third century B.C.; cf. MAYSER, I, 63, 297.
11. κέρμα: "Nicht selten werden die Obolen als Scheidemünze bezeichnet.... Gelegentlich werden auch die Kupferdrachmen als κέρμα bezeichnet." WILCKEN, *Ostraka*, I, 731.
12. Κουπ[ι]νηρι; the π seems fairly certain and the lacuna leaves little room except for ι. The name is unknown to me. For the case cf. the address on the *verso*.
13. L. μηχανῇ and κτήσι.
16. For this use of γαμῆσαι. cf. N.T., *Mark* x, 12; *1 Cor.* vii, 28.
Verso. Pap. απ and π'.

According to Gunn this letter, which he rightly assigns to the end of the Sixth Dynasty, was written by "an unnamed military commander to some person unknown, perhaps an official of the Vizier, concerning a written order from the latter to bring a body of soldiers from the limestone quarries of Tura to probably either Memphis or Saqqara, to receive clothing in the Vizier's presence at a place called the $\overline{\text{𓂏𓂛𓂏}}$. The writer complains," so Gunn conjectures, "(a) that while he is writing from some rather inaccessible place away from Tura, the letter-carrier, availing himself of the transport afforded by a stone-barge, comes no nearer to him than Tura.....; (b) that when he recently spent six days with the battalion in question at the royal Residence-city there was ample time for them to be given clothing, and yet they received none.....; (c) that to make him bring them over again is a vexatious hindrance to the writer's work (at Tura or in the neighbourhood); and (d) that it will entail the loss of a whole day's work to the soldiers. Finally, he asks that the letter-carrier be informed—of his present whereabouts, perhaps."

In criticizing Gunn's interpretation, my point of departure will be the manner in which the writer of the letter is designated (l. 2). The use of the bare title "the Commander of Soldiers" can only signify that the officer in question was too important to need naming. This is also the reason why, both in our letter and elsewhere, the Vizier is not named, but only quoted by his title. If we review the entire situation, other grounds will be apparent why the writer cannot have been an officer of subordinate rank. Would such a man have risked incurring the displeasure of the highest magistrate in the land by criticizing an order of his? And if so, to whom could the complaint have been usefully addressed? It might indeed be suggested that the addressee was a powerful rival of the Vizier, but even so it is difficult to see how such a rival could have intervened in the matter. In any case, the omission of the writer's name remains unexplained except upon the hypothesis which I have adopted. Let us now see how the letter as a whole looks when regarded from this angle.

The quarries of Turah were the source whence the Pharaohs drew the stone for their pyramids, and the well-known inscription of Weni hints how important a personage the commander of the troops there is likely to have been. The writer of our letter was undoubtedly the Commandant at Turah, the high officer in charge of the thousands of quarrymen there employed. But, however exalted his position, that of the addressee was more exalted still, for the writer uses the phrase *b3k im* "this servant" in addressing him¹. It follows that the addressee can only have been the Vizier himself, so that the letter now presents itself to us in the much more natural aspect of a protest against an order addressed to the giver of that order. For such a protest to have been possible, the two parties to the dispute cannot have differed very much in their respective degrees of power. Gunn is clearly right in his view that the head and front of the writer's complaint was the loss of time that would be involved in taking the troops back again to Sakḳārah. The chief remaining point of obscurity is, accordingly, the mysterious mention of "the letter-carrier" $\overline{\text{𓂏𓂛𓂏}}$ in ll. 4 and 7. Gunn's translation disguises the importance of the preposition *hn* in the former passage. Not only is the letter-carrier coming² "with"

¹ It might be objected (and indeed Gunn has put the objection to me orally) that *b3k im* is a mere term of politeness, and implies nothing as to the relative stations of the correspondents. This may well be so for the Middle Kingdom, but I doubt it for the Old Kingdom, since the Elephantine papyri show us that in the latter period *sn-k im* "this thy brother" was the expression used between equals.

² Gunn translates "comes," but the literal sense of *m iwt* "is (in) coming" yields better sense. I point out in my *Egyptian Grammar* (§ 331) that this idiom often refers to immediate future time.

the stone-barge, but he is also coming "together with" the stone-barge. The use of the preposition *hn*^c shows that the stone-barge is an important factor in the story. What part can it have played? Clearly the writer must be hinting that the clothes for his troops could easily be brought over to Ṭurāh on the stone-barge. Consequently, the gist of the letter is an appeal to the Vizier to rescind his order in favour of a more practical way of achieving the same result. The final words of the letter now present an intelligible meaning; the letter-carrier is to be acquainted with the writer's protest in order that he may arrange for the transport of the clothes in the stone-barge.

That the letter was written at Ṭurāh itself, not away from it as Gunn supposes, is indicated by the word $\Delta_{\text{𓆎}}$ "coming" in l. 5; the letter-carrier is not "going" (*šmt*) to Ṭurāh, but is "coming" there. And where else, indeed, should the writer have been save on the site of his habitual work? But Gunn translates the phrase *mdt m dbḥw kḥw* in such a way as to support his view of the writer's absence from Ṭurāh. The phrase is undoubtedly a difficult one, but I do not think that "speak from" (a place) is at all a likely, perhaps not even a possible, rendering of the verb *mdt* followed by the preposition *m*. Surely we have here a new example of the common idiom *mdt m* for to "speak against" something¹. Now we know quite well what the writer is speaking against: he is speaking against the demand that the troops should be taken over to Šakḳārah. Consequently, *dbḥw kḥw* must somehow express the demand. This conclusion gains in plausibility when we note that the word $\Delta_{\text{𓆎}}$ = *dbḥw* comes from a stem which has the meanings "ask," "require," "demand." The word $\Delta_{\text{𓆎}}$ = *kḥ* sometimes means "corner" or the like, but it is connected with a feminine word which later meant "district" or "locality" in a rather general way, and I would conjecturally render *kḥw* here as "localities." If so, the entire sentence will signify that the writer protests against the stipulation as to locality, the literal sense of the words being "speaks against the requirement of localities." *Dbḥw* may well be an abstract (*nomen actionis*) from the stem *dbḥ*, which has taken over the determinative = because the "requirement" in question was a requirement in connexion with land. Such an "attraction of determinatives," as it may be called, though not common, is by no means unknown².

Thus far I think to see clearly, though the writer of the letter has obscured the sequence of his argument by the fourfold use of the very ambiguous particle *šk*. That particle habitually expresses an attendant circumstance, and it appears to me that in the Egyptian the order of the Vizier is represented as being conditioned by four separate circumstances, whereas an English writer would have interrelated those four circumstances in very different ways. Since we cannot escape from our own linguistic habits so far as to employ the English particle "while" in all four cases, I fancy that in translating we shall be justified in substituting the conjunctions "however.....for.....moreover.....whereas." There remain difficulties which I confess myself unable to solve. I do not know what the *šrh*-building (?) was, or why it should have been qualified by the epithet "very beautiful" (*nfr wrt*). It is hard to connect *šrh* with the well-known term for the "banner" which carried royal Horus-names. Another obscurity is in connexion with the clause *šk bk im itf hrw* 6. Gunn thinks that this refers to a recent visit of the writer to the Residence, when six days were spent there and still the troops

¹ See *Zeitschr. f. äg. Spr.*, xxix, 49. In the later examples, as apparently here, the noun following *m* represents the thing spoken against. In *mdw m rwt ḏw* "those who speak evilly against his name" (SETHE, *Pyramidentexte*, I, 16) the idiom seems to have a slightly different sense.

² At the moment I can only quote *Admonitions* 4, 14. Gunn informs me that a word *dbḥ* determined as here occurs Ebers 37, 20, where, however, the context is quite obscure.

received no clothing. For my own part I have grounds for thinking—slender ones it is true¹—that what is there communicated to us was the normal experience of the writer: he has often had to spend six days at the Residence before the troops were clothed. However this may be, I am certain that *šk hrw iś pw w^c ḥbt-f n tzt tn ḥbst-ś* should be rendered “it is a single day only that ought to be subtracted for this troop when it is clothed.” In translating “a whole day” Gunn has missed the point of *w^c*, which is the contrast between the “one day only²” which would be a legitimate and excusable loss of time, and the “six days” which were always lost when the troops went to Saḳḳārah to get their new clothes.

As the result of the considerations set forth above, I offer the following as a revised rendering of the papyrus:

“(1) [*Regnal year*] 11, *first month of summer, day 23.*

(2) *The Commander of Soldiers says:*

(3) *There has been brought to this servant a rescript of the Chief Justice and Vizier with regard to the bringing of the battalion of the gangs of Turah (4) to be given clothes in his presence at (?) the very beautiful Śrh-building. (However,) this servant protests against the requirement as to localities, (for) the letter-carrier (5) is about to come to Turah with a stone-barge. (Moreover,) this servant has been wont to spend six days at the Residence (6) with this battalion before it is clothed—a hindrance to³ the work (done) by this servant—(whereas) it is a single day (only) that (7) should be wasted for this battalion when it is clothed. (Hence) this servant says: Let⁴ the letter-carrier be told.”*

Mr. Gunn points out that the letter was found at Saḳḳārah and had been folded up and then torn in two. Is it too fanciful to think that this was the Vizier's first impulsive comment, perhaps later reconsidered, on the receipt of what he may have regarded as a rather impertinent disputing of his own high authority?

¹ I have pointed out in my *Egyptian Grammar* (§ 107, 2) that *iw* could not be employed after such particles as *šk*. There would be analogies for regarding *šk bšk im ḫt-f* here as a substitute for a theoretical **šk iw bšk im ḫt-f*. If so, these words will virtually contain the construction *iw-f šdm-f* so frequently used to describe custom or rule, whether past, present, or future (*op. cit.*, § 463). Gunn comes near to the mark when he conjectures that the construction here employed may have imperfect meaning. I can add to his examples only Munich 3, 15 (quoted *op. cit.*, § 212), where *ist wi ḫd-i* undoubtedly means “now when I used to fare downstream.”

² For *w^c* “one only” cf. *Eloquent Peasant*, B 1, 13.

³ Literally, “it is (something) that damages the work in the hand of the servant there.”

⁴ Read *iml*, see SETHE, *Verbum*, II, § 537.

NOTES AND NEWS

The work of the Society's expedition party at Tell el-'Amarnah has been attended with considerable success. Mr. Frankfort reached the site about November 22nd, 1926, and was joined later by Mr. Glanville, whose knowledge of the site from previous experience proved of great assistance, and the Society was fortunate in once more securing the services of Mr. H. B. Clark, who worked there during the season 1924-25 as draftsman and architect under Mr. F. G. Newton. The excavations were chiefly devoted to the northern part of the site, where valuable archaeological and architectural evidence was obtained, especially in the precincts of the temple excavated in part by Professor Petrie in 1891. Several objects of great interest were discovered, among them a limestone altar-piece on which are incised figures of the King, the Queen and Meritaten, some bronze temple vessels, a beautiful head of one of the princesses in red quartzite, and a pottery rattle in the shape of a gazelle. Many of the most interesting objects are being retained by the Cairo Museum, but the head of the princess may possibly be on exhibition in London during the summer, though unfortunately it has to be returned to the Cairo collection after exhibition.

Mrs. N. de Garis Davies was in the camp for some weeks copying the beautiful frescoes in the northern palace before they were removed. Mrs. Frankfort undertook the most difficult part of the work of removal with complete success, and it is largely due to her delicate handling that they have been safely detached, and though, again, the Cairo Museum is retaining the best fragments, some will be on exhibition with the other objects this summer. Another special feature of the summer exhibition will be the facsimile copies of the original frescoes made by Mrs. Davies for the volume on Mural Decoration at Tell el-'Amarnah which is to be a memorial to the late Mr. F. G. Newton. Mr. Clark was fully occupied making plans and drawings for the final publication of the site generally. It is much to be regretted that the Society is to lose his expert services. Mr. Frankfort, after having attended to the final division of the antiquities and to their packing and despatch, went to Abydos to complete and prepare for publication the notes made last season on the Cenotaph of Seti I. Mr. Glanville, whose official leave was at an end, returned to the British Museum, while Mr. Clark went on to join Dr. Nelson.

At Abydos, though the photographic survey received sundry checks at the beginning of the season, work was in full swing early in January. The installation of an electric plant has greatly accelerated operations and Mr. Felton hopes to bring home some hundreds of negatives when the work is closed down in April. Mr. Faulkner has been very fully occupied in the recording of the photographs and on the philological and archaeological side of the work.

The lectures on "Cities of Egypt," so far as they have been delivered, have proved particularly attractive. The first of the series, given by Dr. H. R. Hall on October 20th, 1926, on Thebes, was supplemented with a wealth of excellent lantern slides. Dr. A. M. Blackman lectured on Herakleopolis on November 17th, laying special stress on the

religious development of the town. Owing to the fact that most of those who had promised lectures were in Egypt no other could be arranged till February 23rd, 1927, when Mr. H. I. Bell gave an extremely interesting one on Alexandria, followed on March 16th by Dr. D. G. Hogarth on Naukratis. The two last of the series, Memphis, by Mr. S. R. K. Glanville, and Sais, by Professor Newberry, at the time of going to press, have not yet been delivered.

Mr. Somers Clarke died on August 31st, 1926, aged 85 years. Born in Brighton on July 22nd, 1841, and trained as an architect, he was long in partnership with Mr. J. T. Micklethwaite, a well-known authority on western architecture, and in 1897 was appointed surveyor of the fabric of St Paul's Cathedral, an office which he retained till 1922. In 1892 he made the acquaintance of the late Mr. S. S. Tylor, and visited Egypt with him, spending some time at El-Kâb, the place which was ultimately to become his home. The two friends thereafter cooperated to record the monuments of El-Kâb, publishing three tombs and the small temple of Amenophis III in large folio volumes. Somers Clarke took part in Quibell's excavations at the same place in 1897 and afterwards (1897-1899), with Quibell and Green, in the wonderful discoveries of very early royal monuments at Hieraconpolis on the opposite bank. He also made plans and restorations of the two temples at Dêr el-Bahari after their excavation by our Society, but unhappily was too late to preserve the plan of the old monastery from which the site derives its name. In 1912 appeared his most important work, *Christian Antiquities in the Nile Valley*, describing monastic buildings and churches which he had visited at various times in Egypt as well as in Nubia and the Sudan on an expedition with Professor Sayce in 1909-1910. He contributed a valuable paper on the famous town walls of El-Kâb to Volume VII of this *Journal*. Somers Clarke was interested also in Moorish and Arab architecture and served on the Comité de conservation des monuments de l'art arabe. His remarks on the injuries done in the name of archaeology to architectural history by excavators and restorers were many and pungent. It is satisfactory to learn that his observations concerning the methods of the ancient builders, which he began to put into shape in his old age, will appear before long in the work of a skilled collaborator. Over twenty years ago he built himself a beautiful house in the solitudes of Mehamîd, close to El-Kâb, where he lived hospitably with his excellent Nubian servant and interpreter, Daûd Hasan of Argin, latterly going no further in the summer than to his other Egyptian residence at Heliopolis. A few days before his death he was removed from Heliopolis to Mehamid, desiring to be buried in a tomb constructed for himself long before in a cemetery which he gave to the inhabitants of the village. Plate II, Fig. 4, for which we are indebted to Dr. H. R. Hall, shows him at the temple of Amenophis III, holding the measuring pole which was his invariable companion in his expeditions.

The death of Professor Valdemar Schmidt at the age of 90 has removed the *doyen* of Egyptologists in his time. He was born on January 7, 1836, in the village of Hammel in North Jutland. His was a familiar figure not only in Copenhagen, but also in Egypt and in London, as he had English connexions, and was often over here. Once a year even to the end of his days he paid a visit to London and was to be seen seated on a small camp-chair in the Egyptian Gallery of the British Museum, copying some funerary text, his chief interest being in the coffins and their inscriptions. His major work, *Leven og Døden i gamle Egypten*, with its supplement *Sarkofager, Mumienkister og -hylstre*, is a useful collection of illustrations of the styles of the different periods. He was for many

years keeper of the Ny-Carlsberg Egyptian collection, in which post he has been succeeded by Miss Maria Mogensen. The existing catalogue of the collection and the edition of its inscriptions are due to him. He was a constant traveller between Denmark and Egypt, and is once said (though we do not vouch for the authenticity of the tale) to have gone all the way back from Copenhagen to Cairo to recover a favourite umbrella, which on his arrival at home he found he had left behind. He was a good example of the *savant* of the old school. The photograph, Pl. ii, Fig. 3 (facing p. 6), which is excellent, shows him amid characteristic surroundings.

Yet another heavy misfortune has befallen Egyptology in the untimely death of Henri Sottas. Sottas was born in 1880. He chose the army as a career, and it was during his training at Saint-Cyr that he developed an interest in antiquity, more particularly in ancient Egypt. He began by taking a Diploma at the École pratique des hautes études with a thesis called *La préservation de la propriété funéraire en Égypte*. The reception accorded to this work encouraged him to fresh efforts and he determined to devote himself to the study of demotic. The war called him to his regiment and he was unfortunately very seriously wounded in its early months. Unfit for service in the field he was then drafted into the Intelligence Department where his time was appropriately spent in the study of codes and ciphers. His work in this department brought him several mentions in despatches, the *Légion d'honneur* and the *Croix de guerre*.

In 1919 he was elected Professor of Egyptian Philology at the École des hautes études. Here in addition to an *Introduction à l'étude des hiéroglyphes* written in collaboration with M. l'abbé Drioton he produced an important volume called *Les papyrus démotiques de Lille*. He had other important work in hand when he was struck down by influenza.

Those who knew him in these recent years cannot cease to admire the courage which enabled him, broken in the war, unable sometimes to work for days on end, saddened by the loss of his wife, to produce work of the highest scholarly type. He leaves a place which it will be hard to fill.

Dr. Alan Gardiner has spent the winter in Egypt and has visited the Society's excavations both at Tell el-'Amarnah and at Abydos. He has now settled down in Cairo with Dr. de Buck to work on the collection of Middle Kingdom Coffin Texts planned by Professor Breasted. This work is now well advanced and proves of unexpected value not only from the religious and mythological point of view but also from the philological. We do not know what Professor Breasted's arrangements are for the ultimate publication of this immense mass of material, but we have sufficient faith in his powers of organization to feel sure that it will not remain too long locked up in the form of a card catalogue in Chicago. May we further express the hope that the many duties which he has undertaken will not delay indefinitely his publication of the Edwin Smith papyrus, the appearance of which is awaited anxiously not only by Egyptologists but also by medical men, among whom an interest in ancient medicine and the history of their art is at present very widespread?

Mr. H. I. Bell, the Society's Honorary Secretary, whom we congratulate on his complete restoration to health, has also passed part of the winter in Egypt. His Bibliography of Graeco-Roman Egypt which appears in this number is longer and more detailed than

ever. He has been aided in his task this year by Messrs. A. D. Nock and H. J. M. Milne, to whom our thanks are due for this service, but in spite of this help he finds that owing to the ever increasing amount of publication the task of collecting and condensing the material is now literally beyond his powers in the time at his disposal. It would be a tragedy if this bibliography, one of the most valuable services rendered to Egyptology by our *Journal*, should have to cease, and the Editor hopes that by distributing the work between four or five volunteers it may still be possible to carry on. The main difficulty lies in the strange lack of scholars of the younger generation with the desire and the ability to deal with work of this important kind.

According to an article which recently appeared in *The Times*, and which is evidently to be regarded as official, Mr. Robert Mond finds himself forced by the demands made on his time by his business engagements in this country to discontinue his excavations in Egypt, which for the last two years have been carried on in the name of the University of Liverpool Institute of Archaeology, of which Mr. Mond has for many years been a generous friend. His retirement from the field of excavation is a serious blow to Egyptology, but we trust that this need not involve his renunciation of the equally important if less spectacular work of preservation of tombs. Not only every Egyptologist but every tourist who has visited Shêkh 'Abd el-Kurnah knows what the private tombs owe to Mr. Mond's enthusiasm and generosity.

During the past season he and his assistants, Messrs. Emery and Callender, have been excavating a site at Erment which appears to be that of the burial ground of the mothers of the sacred Buchis bull. Very little news has as yet come to hand about the site but it is clearly one of considerable importance, if not on the magnificent scale of the Serapeum at Memphis, and will doubtless repay at least one more season's excavation.

The official reports of Mr. Mond's excavations are being published in the *Annals of Archaeology and Anthropology*, issued by the University of Liverpool Institute of Archaeology. The work of the season 1924-25 appears in Vol. XIII, and that of the following season is just about to appear in Vol. XIV. This latter report deals with a number of the private tombs and is very fully illustrated, the plates including twelve full page photographs of scenes in the tomb of Paheqmen.

Dr. Gardiner's *Egyptian Grammar* has at length appeared, and no one who has seen and used the book will regret the long delays on which Dr. Gardiner has insisted in the interests of completion and perfection, in so far as either is possible. Professor Griffith has undertaken the arduous task of reviewing it in our next number.

Dr. Gardiner may be interested to know from one who has already used the book in class that it has revolutionized the teaching of Egyptian, and that two pupils who have been using it have in the short time since its appearance made quite remarkable progress.

The Times newspaper has recently published articles by Dr. Reisner on the tomb of Hetepheh, wife of Sneferu and mother of Khufu, which he has found not far from the Great Pyramid at Gizah. The condition of the objects, especially those of wood, in this tomb is such that we can only be thankful that it has fallen into the hands of so consummate an excavator as Dr. Reisner, whose methods of excavation and restoration will, we may rest assured, reconstruct as nearly as possible in its pristine form this mass of metal and timber which thirty years ago would have been deemed fit only for the Museum scrap heap.

The double statue of Wersu and his wife described by Professor Griffith in *Journal*, II, 5 ff., has now found its way into the Folkwang Museum at Essen. We mention this because isolated monuments of this kind have a habit of disappearing, and it is most important that their movements should be traced in case re-study should ever become necessary. Readers may remember that the highly important statue of Prince Ahmose, son of King Sekenenrê Ta'o II of the Seventeenth Dynasty, published by Mr. Winlock in *Journal*, x, Plates xii and xviii-xx, is for the present a lost monument. The faded and not too satisfactory prints from which our plates were made are the sole remaining record of its existence.

The following is from a letter which we have received from Sir Herbert Thompson.

"May I ask to be allowed to correct an erroneous reading in the papyrus of St. John's Gospel which I edited for the British School of Archaeology in Egypt in 1924?

In Ch. ix, 39 I read the last words as $\pi\tau\alpha\gamma\ \epsilon\epsilon$, and I called attention to it as a unique phrase on p. xviii. At the instance of Professor Spiegelberg I made a re-examination of the original papyrus recently and the result is that the ϵ can be, and therefore should be read as having been originally a π , and the abnormal reading abandoned in favour of the normal $\pi\epsilon$.

The following corrections are therefore called for, viz.:

p. 19, col. ii, fourth line from bottom, for ϵ read π .

p. 47, mid. col., s.v. $\epsilon\epsilon$ pronom. suffix, *dele* '3 sg....9, 37.'

Introd. p. xviii, col. i, ll. 21-22, *dele* 'An interesting...ix. 37.'"

The Cambridge University Press, which prints the *Journal* for the Society, has acquired a fount of the new pica hieroglyphic type made by Dr. Gardiner for the printing of his *Grammar*. The advantages of this type are twofold. In the first place it is so designed as to be capable of incorporation in the ordinary letterpress without the introduction of extra space between the lines: anyone who will compare p. 51 of this number with p. 214 of Vol. xi will realize the improvement which has been effected. In the second place the new types instead of being copied from the debased forms of the Twenty-sixth Dynasty are all taken from originals of the Eighteenth Dynasty in the Theban tombs. The drawings for the matrices are the work of Mr. and Mrs. de Garis Davies, and they have been modified only so far as was required by the process of reduction to small size. The type has a charm which is altogether wanting in earlier founts, and there is not the slightest doubt that it will set the standard for the future in all scientific Egyptian publications. The use of this fount has necessitated a slight change in the make up of the *Journal* page. It is so slight, however, that few will notice it, and those who do will at least admit that it is not a change for the worse.

Dr. Gardiner's fount has also been cut in the size technically known as 3-line nonpareil, used on p. 38 continuous. This is a larger size designed for use in the publication of texts where the smaller forms of the pica fount might in the long run become trying to the eyes.

The long delay in the issuing of the present number is due to our desire to make use in it of the new fount, portions of which have only just been delivered to us.

BIBLIOGRAPHY: GRAECO-ROMAN EGYPT

A. PAPYRI (1924—1926)

BY H. I. BELL, A. D. NOCK AND H. J. M. MILNE¹

1. LITERARY TEXTS.

(*Omitting religious and magical works, for which see § 2.*)

Since the last issue of this bibliography two years ago (*Journal*, XI, 84-106) only one important collection of new literary papyri has appeared (P.S.I., VII, see § 3). We may mention nos. 750-5 Homer, two comic fragments 846-7, Aesop (848, 4th cent.) in Greek and Latin, interpretations of *Aeneid*, II, 443-537 (756, 4th-5th cent.), Alexander the Great and the gymnosophists (743, Gk. text in Lat. script, 1st, 2nd cent.), besides philosophy, grammar, mathematics, and so on.

A convenient collection of material in Russia and Georgia is being made by ZERETELI and KRUGER, of which the literary part has appeared (*Papyri Russ. und Georg. Sammlungen*, I, Tiflis, 1925). These have practically all been published before but in rather inaccessible places. Noticed by CALDERINI in *Aegyptus*, V (1924), 368, and reviewed with suggestions by L. CASTIGLIONI, *op. cit.*, VII (1926), 223-36. Brief but laudatory review by SCHUBART in *Gnomon*, I (1925), 347 f. Account of the contents by H. O. in *Journal des savants*, 1926, 38-9.

HUNT promises a new volume of the *Oxyrhynchus Papyri* (XVII) soon, containing, besides further scraps belonging to the *Ichneutae*, the *Euryppilus*, *Borchylides*, etc., important new fragments from the *Aitia* of Callimachus. Vol. XV is reviewed by E. CAHEN in *Bulletin de l'Association Guillaume Budé*, no. 3.

Here we may mention POWELL'S *Collectanea Alexandrina* (Oxford, 1925), bringing together in convenient compass the smaller fragments—epic, elegiac, lyric, ethic; of the Greek poets of the Ptolemaic Age 323-146 B.C. The epigrammatists are reserved for a second volume in preparation. Reviewed with suggestions by A. D. KNOX in *Class. Rev.*, XXXIX (1925), 190-3. Other reviews by EDMONDS in *Cambridge Review*, 11 March, 1926, ROSFAGNI in *Riv. di Fil.*, N.S., III (1925), 571-3, P. SHOREY in *Class. Phil.*, XX, 348-9, E. CAHEN in *Rev. ét. anc.*, XXII (1925), 185-7.

A number of papyrological contributions appear in *Raccolta di scritti in onore di Giacomo Lumbroso* ("Aegyptus" publications, Scientific series, III, 1925). Most are mentioned in their proper place. Here we may refer to *Drei Ostraka des Berliner Museums*, 253-9, by P. VIERECK, containing Theognis, frg. of comedy, fr. 11 from the *Ageus* of Euripides, moral lines (prose) and a smutty epigram on Kleitorios.

I learn from *Rev. ét. gr.* (XXXVII, 431) of a new book on Alexandrian poetry by PH. E. LEGRAND, *La poésie alexandrine*, Paris, Pagot, 1924, pp. 168. 16mo.

OLDFATHER'S *Literary Texts* is reviewed by M. HOMBERT in *Rev. belge de philologie et d'histoire*, V (1926), 547-9.

In CRUM and EVELYN WHITE, *Monastery of Epiphanius* (full title, etc. in § 3) are to be found the following Greek literary scraps:—611, *Iliad*, I, 1 (vi—early vii cent.) as exercise, 612 (same), 613 (*Il.*, I, 201, etc.), 614 (*Il.*, I, 21, etc.), 615 (sentences from Menander), 616 (*Anth. Pal.*, IX, 538). All these interesting as showing survivals of Gk. literature even in monastic schools. 621 (list of bird-names; glossary?), 622 (medical prescription).

¹ The labour of preparing this bibliography has so much increased for some years that after the completion of the last instalment I decided that if it was to be continued I must find some assistance. Mr. Milne kindly undertook to be responsible for § 1 and Mr. Nock for § 2. The first joint article should have appeared last year, but a break-down in health in the autumn of 1925 and a consequent medical veto on all private work for two or three months afterwards made it impossible for me to do my portion, and it was therefore decided to defer the whole to the present year. The instalment therefore covers two years. It follows the same general principles as previous ones, and, as before, Mr. Tod and Mr. Baynes have contributed some valuable references. H. I. B.

Epic. In *Symbolae Osloenses*, III (1925), 20-5 G. RUDBERG edits a vulgate-text of *Iliad*, VI, 196-275 from a Christiania papyrus. A new papyrus of the *Odyssey* (212-κ 96) is described by O. GUÉRAUD in *Rev. ét. anc.* (1925), 88-131. It belongs to the second half of the 3rd cent. and the text is analogous to the vulgate, presenting only 5 extra verses and omitting 13. Important confirmation of Alcidas' connexion with the *Certamen* of Homer and Hesiod is provided by a new fragment found at Karanis (2nd 3rd cent.) published by J. G. WINTER in *Trans. and Proc. Am. Phil. Ass.*, LVI (1925), 120-9 with subscription [Ἀλκιδάμαντος περὶ Ὀμήρου. P. Mich. Inv. No. 2754. The evidence of papyri is used in a book by G. M. BOLLING, *The External Evidence for Interpolation in Homer*, Oxford, 1925. Reviewed in *Times Lit. Suppl.*, 4 March, 1926, and by P. SHOREY in *Class. Phil.*, XXI (1926), 279-80. An important article by N. WECKLEIN appears in *Rh. Mus.*, LXXIV (1925), 13-24, *Die Homervulgata und die ägyptischen Papyrusfunde*. Successive volumes of BÉRARD's *Odyssey* in the Budé series are reviewed by G. RADET in *Rev. ét. anc.*, XXVII (1925), 47-50 and XXVIII (1926), 69-72. A. RZACH writes in Bursian's *Jahresbericht*, 1924, Heft 8 10, 1-115, a report on publications rel. to Hesiod for the ten years 1909-18. D. MEULI's dissertation (see *Journal*, XI, 85) on the 3rd cent. B.C. hymns at Chicago is reviewed by G. MÉAUTIS in *Aegyptus*, VI (1925), 282.

WILAMOWITZ in CCIII of his *Lese-fruchte* (*Hermes*, LXI, 277-8) doubts if the Hesiodic Catalogue (P. Oxy. 1359) is really Hesiod's. P. Oxy. XV, 1794 is discussed by W. MOREL in *Phil. Woch.*, XLVI, 351. He restores verse 21.

Lyric Poetry. The study of Sappho has been placed on a new basis by LOBEL'S ΣΑΠΦΟΥΣ ΜΕΛΗ, Oxford, 1925, with its rigorous research into Sappho's usage. EDMONDS in *Comb. Rev.*, 28 Jan. 1926, and *Times Lit. Suppl.*, 4 Feb. 1926, thinks LOBEL too strict and fastidious, while J. F. DOBSON in *Class. Rev.*, XL (1926), 196-7, thinks him too cautious. Briefly noticed by A. V. in *Ric. di Fil.*, N.S., IV (1926), 134-5. Review by C. D. B[UCK] in *Class. Phil.*, XXI (1926), 267-9. An Italian edition, *I nuovi frammenti di Saffo* (versioni ritmiche seguite de tre note critiche), by SALVATORE STELLA, is reviewed in *Class. Rev.*, XL (1926), 171.

EDMONDS' *Lyra Graeca*, II, receives unfavourable comparison with DIEHL'S *Anthologia Lyrica* from E. BETHE in *Phil. Woch.*, XLVI (1926), 113-4. SHOREY reviews it in *Class. Phil.*, XX, 171. DIEHL is reviewed by T. HUDSON WILLIAMS in *Class. Rev.*, XXXIX, 182-3. A restoration of Sappho (Diehl fr. 38) by VOGLIANO in *Note Critiche* (*Boll. di Fil. Class.*, XXXII, 37).

In *Mnemosyne*, LIII (1925), 343-50, W. E. J. KUIPER reconstructs the initial verses of Ode XV of *Bacchylides* as an invocation to Dionysus, *De Bacchylidis Carmine*, xv. The *Persians* of Timotheus is treated by H. L. EBELING in *Am. Journ. of Phil.*, XLVI (1925), 317-31, with reference to K. ARON'S Greifswald Diss., 1920. The Alexandrian Erotic Fragment (P. Grenf. I, 1) has been done into Italian, "L'Esclusa" by CATANDELLA in *Athena e Roma*, N.S., VI (1925), 225-6. In his *Lese-fruchte*, CXC, WILAMOWITZ deals with the sailors' song, P. Oxy. 1883. MARCEL HUMBERT in an essay, *A propos des lectures préférées des lettrés de l'Égypte* (*Rev. belge de philologie et d'histoire*, no. 4, 1924), connects the relatively large number of 2nd cent. lyric papyri with the popularity of the rhetoricians who drew largely on the lyric poets.

MAASS attaches P. Oxy. IV, 661 to the Dictynna legend in *Hermes*, LVIII, 175-86.

In *Zeitschr. f. Vergleich. Sprachforschung*, III (1925), 311, W. SCHULZE has a note on Aeolic ἀλώπα and ὀλοφύς.

Epigrams, Satire. KNOX continues his important discoveries on the *Kerkiras* papyrus in *Class. Rev.*, XXXIX (1925), 50-5. In *ibid.*, 28-9, BARBER reviews KNOX'S *First Greek Anthologist*. An important review of the same work by J. SITZLER appears in *Phil. Woch.*, XLV (1925), 721-36.

WILAMOWITZ in *Lese-fruchte*, CCIX (*Hermes*, LXI), finds a verse of Euphron in the *Didymus* commentary on Demosthenes.

WILAMOWITZ'S *Hellenistische Dichtung* is reviewed by SHOREY in *Class. Phil.*, XX, 75-7. Critical. The same work is praised, especially the Callimachus part, in *Class. Rev.*, XXXIX, 189-90, by G. BARBER, who also reviews PFEIFFER'S *Callimachus* (*ibid.*, 29-30). Does not think Sosibius satisfactorily identified. Corrections of *Callimachus* are published by MAASS in *Hermes*, LX (1925), 259.

Drama. The new Oxford Sophocles by A. C. PEARSON is reviewed with special reference to papyri by A. E. HOUSMAN in *Class. Rev.*, XXXIX (1925), and by O. NAVARRE in an article, *Les papyrus grecs et la critique verbale, à propos d'une édition nouvelle de Sophocle* (*Rev. ét. anc.*, XXVII (1925), 239-43). In *Rev. ét. gr.*, XXXVII (1924), 365, T. R[EINACH] reviews TUBEER, *De vocab. quibus Soph. in Ichne. usus est*, and in *Aegyptus*, VI (1925), 313-29, G. GUARINI relates the language of the *Ichneute* to that of comedy—*La lingua degli Ichneutai di Sofocle*. The up-to-date use of papyri is commended by PEARSON (*Class. Rev.*,

xxxix, 180-1) in a review of Vols. III and IV of the Budé *Euripides*. MILNE would identify Pap. Petrie II, 49 (d) dx as belonging to the *Hypsipyle* (*Class. Rev.*, xl, 64).

Two important publications on Menander have appeared, CAPOVILLA's book mentioned in the last bibliography and WILAMOWITZ's edition of the *Epitrepontes* (*Das Schiedsgericht*, 1925). The former seeks to sketch the development of Menander's technique and the chronological sequence of the plays. Reviews by LAVAGNINI in *Riv. di Fil.*, N.S., III (1925), 423-5, and by A. ANNARATONE in *Riv. Indo-Gr.-Ital.*, IX (1925), 137-8. WILAMOWITZ provides text, translation, and commentary, and prefixes an essay on Menander's art. Reviewed by KÖRTE in *Gnomon*, I (1925), 18-23, E. WÜST in *Phil. Woch.*, XLV, 865-70, D. S. ROBERTSON in *Class. Rev.*, xxxix, 188-9, and A. VOGLIANO in *Boll. fil. class.*, xxxii (1925-6), 145-53.

The attribution to the *Epitrepontes* of the Didot *ῥῆσις*, first made by D. S. ROBERTSON in the *Class. Rev.*, xxxvi, 106 ff., has drawn an answer from KÖRTE in *Hermes*, LXI (1926), 134-56. K. assents to the authorship of Menander but assigns the speech to an earlier play. He disagrees with the suggestion of MILNE (*Class. Rev.*, xxxix, 117) that the meaningless *σποδραγῆς* harks back at some removes to *επιτρεποντες*. ROBERTSON maintains his previous argument in *Hermes*, LXI, 348-50, and KÖRTE adds a final note (350-1) postulating *σποδραγῆς* as a solution of the cryptic word. Legal issues in the *Epitrepontes* are dealt with by R. TAUBENSCHLAG, *Das attische Recht in der Komödie Menanders Epitrepontes*, in *Z. Sav. St.*, XLVI (1926), 68-82. The conclusion of the *Samia* is discussed by W. E. BLAKE in *Proc. Am. Phil. Ass.*, LV (1924), XXV-XXVI, and the same play forms the subject of an article, *Zur Samia des Menandros*, by K. KUNST in *Wiener Studien*, XLIII (1922-3), 147-56.

In *Raccolta Lombroso*, pp. 29-35, K. KALBFLEISCH publishes from an anthology (P. Giessen, 152) a comic fragment of 10 lines followed by a passage from the *Nomothetes* of Menander. O. HENSE continues in *Wiener Studien*, XLIII, 1-7, his notes on fragments of comedy.

New editions of Herodas are in preparation, by KNOX for the *Loeb* and by NAIRN for the *Budé* series. An Italian edition by N. TERZAGHI has already appeared, *Eroda: I Mimambi*. Testo critico e commento. Pp. viii+200. Turin: Chiantore, 1925. Introduzione e traduzione. Pp. 100. Turin: Paravia, 1925. Devastating review by KNOX in *Class. Rev.*, xl (1926), 68-9. Reviewed also by A. TACCONE in *Boll. Fil. Cl.*, xxxii, 193-5, and along with KNOX's and Groeneboom's editions by HERZOG in *Phil. Woch.*, XLVI (1926), 193-211. HERZOG has also issued a second edition of CRUSIUS's translation, remodelled and with textual improvements—*Die Mimamben des Herondas*, Dietrich'sche Verlagsbuchhandlung, 1926. *Herondea* by HERZOG in *Philologus*, LXXXII (1926), 27-66, is important. KNOX has also published new readings in *Class. Rev.*, xxxix, 13-5, and in *Phil. Woch.*, XLVI, 77 ff. opposes many suggestions made by EDMONDS in *Class. Quart.*, XIX (1925), 129-46. In *Herodes und Collimachus* (*Philol.*, LXXXI, 241-55), KNOX interprets the *Dream* as involving a literary dispute between these two authors. A. VOGLIANO in *Riv. di Fil.*, N.S., III (1925), 395-412, gives the first instalment of *Nuovi studi sui Mimambi di Erodo*. In *Riv. Indo-Grec.-It.*, x (1926), 14, F. RIBEZZO interprets *Mime IV*, 94-5. The legend of Kanarese speeches in the *mime P. Oxy. 413* will scarcely survive the strictures of L. D. BARNETT in *Journal*, XIII, 13-5.

History. Fragments of an archaeological commentary on *Thucydides*, I are identified by H. GERSTINGER in the Vienna papyrus 29247 (*Denkschr. Wien. Ak.*, LXVII (1925), 2 Abh. Pp. 20). The *Hellenica Oxyrhynchia* has had a new author assigned to it, Daimachos of Plataea, by F. JACOBY—*Der Verfasser der Hellenica von Oxyrhynchos* in *Gott. Nachr.*, 1924, 13-8, and under that name it is published in pt. II of his *Fragm. der Griech. Historiker* (1926). KALINKA has edited the *Hell. Oxy.* for Teubner (1927) with full bibliography. BILABEL's *Historikerfragmente* is reviewed in *Museum* (Leiden), xxxii (1924-5), 172-4, by M. ENGERS, and by W. WEBER in *Phil. Woch.*, XLV (1925), 150-3. A. W. GOMME contributes critical notes on the Ἀθηναίων Πολιτεία in *Class. Rev.*, xxxix, 152-4, XL (1926), and in *Journ. Hell. Stud.*, XLVI (1926), 171-8. In *Raccolta Lombroso*, 305-15, S. LURIA makes comments on Ἀθ. Πολ. 1-16. The *Pheidias* papyrus at Geneva is again connected with the sculptor by W. JUDEICH, *Zum Pheidias-Papyrus*, in *Hermes*, LX (1925), 50-8. W. BANNIER writes on P. Oxy. 870, *Ein Papyrusfragment aus der Chronik des Hippolytos*, in *Philologus*, LXXI (1925), 123-7. In an important contribution to *Rac. Lombroso*, CRONERT re-edits the Mahaffy fragment on the Syrian wars—*De critici arte in papyris exercenda*, 439-534.

The *Munro* epitome, first published in *Kleinere Historikerfragmente*, is reissued by BILABEL with commentary in the *Budenpapyri*, Heft 4 (1924), no. 59.

Law. In *Aegyptus*, VII (1926), 243-68, S. LURIA in an article *Vater und Sohne in den neuen literarischen Papyri* discusses ἀποκρίσεις with reference to the *Alcibiades* of Aeschines Socraticus (P. Oxy. XIII, 1608) and to Antiphon Sophistes (P. Oxy. XI, 1364).

P. DE FRANCISCI contributes *Nuove osservazioni intorno al P.S.I. 55* (index to the Digest). *Rac. Lumb.*, 217-22.

Lexicography. BELL and CRUM publish in *Aegyptus*, VI, 177-226, *A Greek-Coptic Glossary*, by Dioscorus of Aphroditon. Interesting and late uses of words, sometimes confirming the lexicographers. Important review by CRÖNERT in *Gnomon* (1926), 655-66.

P.S.I. VIII, 892 is a small fragment from a 4th cent. lexicon.

Medicine. I see from *Rev. Fil. Cl.*, LIII, 596-7, that E. NACHMANSON has edited in *Minusskrift utgiven av Filologiska Samfundet i Göteborg 1925*, a comment on Galen, I, 64 ff. (Kühn), *Περὶ αἰσθήσεων τοῖς εἰσαγομένους*, from Berlin Pap. 11739. *Ein Neuplatonischer Galenkommentar auf Papyrus*.

An extract from Anonymus Londinensis 137 is ascribed to "Hippokrates des Thessalos Sohn" by M. WELLMANN in *Hermes*, LXI (1926), 329-34.

Music. N. TERZAGHI discusses the Christian hymn with notation (P. Oxy. xv, 1786) in *Racc. Lumbroso*, 229-34.

Orators. An interesting text of Demosthenes' 3rd *Philippic*, 29-34, 61-8, with 12 peculiar readings, some confirming conjectures, has been published from a Michigan vellum leaf in *Class. Philol.*, xx (1925), 97-114, by J. G. WINTER. In *Hermes*, LX, 372, F. HEICHELHEIM identifies P.S.I. VII, 762, as from the *Panegyricus* of Isocrates.

In *Rev. ét. anc.*, XXVII (1925), 5-10, P. ROUSSEL writes on *La prétendue défense d'Antiphon*, a papyrus published by Nicole in 1907.

I learn from *Phil. Woch.*, XLIV (1924), 998, of an article *Zum Papyrus Dapit*, by L. RADEMACHER, in *Anz. Ak. Wiss. in Wien*, 21 Nov. 1923. Hierocles of Alabanda suggested as author.

Philosophy. CALDERINI gave an address on *Il contributo della papirologia greca allo studio della filosofia* to the Fifth Internat. Congress of Philosophy (extracted from the *Atti*, 5-9, May, 1924). The Sophist Antiphon is studied by FR. PFISTER in *Phil. Woch.*, XLV (1925), 201-5, with reference to P. Oxy. 1364 and 1797, and by S. LURIA in *Aegyptus*, v (1924), 326-30, where a comparison is instituted with the *Alexander* of Euripides—*Aglottia*.

JENSEN's *Philodemos über die Gedichte* is reviewed in *Ateve e Roma*, N.S., VI (1925), 316-8, by G. COPPOLA, and by J. VAN LEEUWEN, JR. in *Museum* (Leiden), XXXII (1924-5), 58-60. T. KUIPER's *Philodemos Over den dood* is reviewed by D. BASSI in *Aegyptus*, VI (1925), 279 f.

V. DE FALCO's *L'Epicureo Demetrio Luccone* is reviewed by H. JANSSENS in *Bull. bibl. et pél. du Musée Belge*, XXVIII (1924), 14-5, while DE FALCO himself writes on Pap. Herc. 1675 in *Rev. Indo-Greco-Ital.*, x (1926), 15-26—*Appunti sul Περὶ Κολακείας di Filodemo*.

I see from *Rev. fil. cl.*, LIII, 595, that S. LURIA interprets P. Oxy. III, 414 as the work of an opponent of Homer, perhaps Antiphon Sophistes, in *Bull. Acad. Scient. Russ.*, 1924, 373-82.

VOGLIANO re-edits a philosophic text in *Note Critiche* (*Boll. di Fil. Cl.*, XXXII, 36-8).

Romance. In *Aegyptus*, VII (1926), 163, A. CALDERINI reviews JAROSLAV LUDVÍKOVSKÝ, *Řecký Román Dobrodružný*=*Facultas Philosophica Universitatis Carolinae Pragensis*, XI, 4^o, pp. 160, Praha, 1925, on the origins of Greek romance.

A new interpretation of the *Chione* fragments is given by R. M. RATTENBURY in *Class. Quart.*, xx (1926), 181-4, while in *Rac. Lumb.*, 407-38, A. NEPI MODONA discusses the nature of the so-called pagan "Acta Martyrum"—*Protocolli giudiziari o romanzo storico?*

2. RELIGION, MAGIC, ASTROLOGY.

(Including *Texs.*)

Pagan cults. General. TH. HOPFNER has published the concluding part of his *Fontes Historiae Religionis Aegyptiacae* (*Pars V auctores aetatis Byzantinae mediae, addenda et corrigenda, conspectum auctorum omnium, indices nominum et rerum continens*, Bonnae, Marcus and Weber, 1925. Pp. 711-932). The general index is of the highest value and the book as a whole an indispensable working instrument. The whole has been reviewed by W. A. HEIDEL (*Am. Journ. Phil.*, XLVII (1926), 103); Parts II, III and V by A. WIEDEMANN (*Or. Lit.-Z.*, XXVII (1924), 709-10; XXVIII (1925), 71; XXIX (1926), 36-7); Parts IV and V by F. VON BISSING (*Phil. Woch.*, XLV (1925), 128-9, 1364-6; and by G. RADET (*Rev. ét. anc.*, XXVII (1925), 160, 341-2); cf. also *J.H.S.*, XLV, 279. G. ROEDER's account of Egyptian beliefs in the divinity of the monarch (EBERT, *Reallexikon der Vorgeschichte*, VII, 26) should be mentioned as affecting our subject.

In A. B. COOK's *Zeus*, II (Camb. Univ. Press; in two parts; 1925. Pp. xlii + 1397. £8. 8s.) we may note specially his admirable collection of material on *Hypsistos*, pp. 876-90, and his note on *Agathos Daimon*, pp. 1127-9. We may also remark O. WEINREICH's excellent bibliography of Greek Religion, *Archiv für Religionswissenschaft*, XXIII, 45-150, and the most useful summaries and criticisms of recent study in *Jahrbuch für Liturgiewissenschaft*, I- (1921-; Münster). E. F. BRÜCK, *Totenteil und Seelgerät im griechischen Recht* (*Münchener Beiträge z. Papyrust. u. antiken Rechtsgesch.*, 9tes Heft. C. H. Beck, München, 1926. Pp. xxiv + 374), is an admirable survey over a long period and breaks new ground. It has been reviewed by K. LATTE (*Gnomon*, 1927, 38-43; very instructive comment) and H. J. ROSE (*Class. Rev.*, XI, 214).

For the religious significance of Greek names in *παρομ*- see § 8 below. For SPIEGELBERG's article, *Der Gott Nephotes*, see § 9.

Pre-Ptolemaic. V. EHRENBURG, *Alexander und Ägypten* (*Beihefte zum "Alten Orient,"* VII, 1926), p. 17 *sqq.* discusses usefully the attitude of Alexander to the Egyptian gods, p. 18 disputes WILCKEN's view that Osorapis must have been a seated figure, p. 19 treats of the 6th century Greek Apis statuette, p. 33 remarks well on the double religious aspects, Greek and Egyptian, of the visit to Ammon's oracle. Reviewed by F. JACOBY, *Gnomon*, II (1926), 459-63 (favourably), J. G. M., *J.H.S.*, 1926, 282 f. (who holds that the religious motive was pure camouflage. But?).

Attention may be drawn to W. KROLL's admirable edition of Ps. Callisthenes (*Historia Alexandri Magni* (*Pseudo-Callisthenes*), *volumen I, recensio critica* edidit Gulielmus Kroll); Weidmann, Berlin; 1926. Pp. xvi + 166.

Bk. I is an *Alexandreingeschichte*, rather than an *Alexandergeschichte*. On the account therein of the founding of the altar of Agathos Daimon, cf. VOGT, *Die Alexandrinischen Münzen*, I, 109.

Ptolemaic. F. KORNEMANN, *Die Satrapenpolitik des ersten Lagiden*, in *Rivista Lumbroso*, 235 *sqq.*, interprets Ζεὺς Βασίλειος in Arrian, III, 5. 2 as Osorapis; EHRENBURG, 40, is very likely right in preferring to think of Ammon. KORNEMANN, *Aus der Geburtsstunde eines Gottes* (*Mitt. d. schles. Ges. f. Volkskunde*, XXVII, 1926, 5 *sqq.*), is an excellent treatment of the early history of the cult of Sarapis, first at Memphis, then at Alexandria and of its general development at Alexandria¹. H. GRESSMANN in the course of a general article on the Hellenization of Oriental cults, *Vorträge der Bibliothek Warburg*, 1923, 4 (published 1926), 170-95, devotes some pages (179 ff.) to those of Egypt. W. SCHUBART, *Hellenismus und Weltreligion* (*Neue Jahrb. f. Wiss. u. Jugendbildung*, II (1926), 595-20), gives a brilliant and imaginative sketch of a more or less popular character of the significance of *Hellenismus* for the development of the conception of personality and a world religion.

Ptolemaic religious policy is discussed also by U. VON WILAMOWITZ-MOELLENDORFF in *Hellenistische Dichtung* (1924), I, 24; the attitude of the Egyptian priesthood by TH. HOPFNER, *Orient und griechische Philosophie* (*Beih. z. a. O.*, 4; 1925), 46 ff.

W. SPIEGELBERG, *Beiträge zur Erklärung des neuen dreisprachigen Priesterdekretes zu Ehren des Ptolemaios Philopater* (*S. B. bay. Ak. Wiss. philos.-philol. u. h. Kl.*, 1925, iv), discusses a text preserved wholly in demotic, partly in hieroglyphic, partly in Greek, relating to a celebration in honour of the victory of this Ptolemy over Antiochus at Raphia.

W. SPIEGELBERG-W. OTTO, *Eine neue Urkunde zu der Siegesfeier des Ptolemaios IV und die Frage der ägyptischen Priestersynoden* (*S. B. bay. Ak. Wiss. philos.-philol. u. h. Kl.*, 1926, ii), show from P. Berol. 13565 (demotic) that this celebration took place in Alexandria.

S. discusses the religious importance of the *Stob-Straussen* (*Lebens-Straussen*) laid before the king. He and OTTO give divergent interpretations of the papyrus, and OTTO sketches the history of priestly synods in Egypt, and the evidence for their annual meeting, and for their acquisition of influence under Ptolemy Philopator.

For the religious significance of Cleopatra's death by snake-bite cf. SPIEGELBERG's article noticed in § 4.

F. BILABEL reinforces a conjecture of SPIEGELBERG's that the personal name Κολ(λ)άνθης is connected with the god Klnl by citing two other occurrences of the Greek form in an obviously divine sense. *Der Gott Kolanthes*, in *Archiv*, VIII, 62.

Imperial. F. BILABEL, *P. Baden*, Heft 4 (see § 3), includes as no. 89 most interesting regulations for the cult of Severus Alexander and Julia Mamaea at Hermopolis Magna, unfortunately a good deal mutilated but yielding material of value.

¹ For J. G. MILNE's article, *The Kline of Sarapis*, in *Journal*, XI (1925), 6-9, see § 5. On Sarapis under the Empire cf. J. VOGT, *Die Alexandrinischen Münzen*, *passim*, as for instance I, 75, 85 ff., 104 f., 150, 155 f., 172.

In his *Ägyptische Thronbesteigungsurkunden* (Cimbria, 63-70; Ruhfus, Dortmund; 1926; obtainable separately) he discusses P. Oxy. 1021 and traces back the formulae of homage used on Nero's accession to Pharaonic models. (Cf. VOGT, *Die Alexandrinischen Münzen*, I, 231, on the Emperor as successor of the old monarchs.)

E. PETERSON, ΕΙΣ ΘΕΟΣ. *Epigraphische formgeschichtliche und Religionsgeschichtliche Untersuchungen* (*Forschungen zur Religion und Literatur des Alten und Neuen Testaments*; Neue Folge, 24 Heft; Vandenhoeck u. Rupprecht, Göttingen; 1926. Pp. viii+346), is a corpus of εἰς θεός monuments and the like with most important discussion of the religious importance of acclamations, of the Sisinnios legend, etc. In *Theol. Lit.-Z.*, 1925, 485-7, he shows reason to doubt the existence of the Egyptian religious mysticism which CUMONT held to have influenced Plotinus.

W. WEBER, *Der Prophet und sein Gott* (*Beit. z. a. O.*, 3; 1925), 118, regards P. Oxy. 1380, 103 as identifying Isis and the Indian Maya. On that text cf. also J. VOGT, *op. cit.*, I, 63 f., who regards it as a composition of the 1st cent. A.D. and an Alexandrine attempt to centralize worship¹.

A. D. NOCK, *Studies in the Graeco-Roman beliefs of the Empire* (*J.H.S.*, XLV, 84-101), discusses the kinship of magical and mystery thought, the various manifestations of an interest in divine power rather than divine personality², dedications εἰς ἑπιταγήν, and *inter alia* the κάρτοι question (p. 100_{II}; generally to be taken in the religious sense).

Hermetica. Volumes II and III of SCOTT's *Hermetica* have now appeared (pp. 482 and 632; Oxf Univ. Press. 25s. each). Since Scott's death, which all fellow-students will regret, A. S. FERGUSON has undertaken the task of seeing the rest of the edition through the press. The subjective nature of SCOTT's text has been deplored by all critics, but the Commentary has put together a great quantity of illustrative material for the use of others and its appearance should prove a great stimulus to study of this difficult and important field³.

Volumes I and II have been reviewed in *Journ. Hell. Stud.*, XLV (1925), 135; by A. PUECH in *Rev. ét. anc.*, XXVII, 166-8, 352-6, FR. PFISTER in *Phil. Woch.*, XLV, 615-22 (with useful bibliographical material), F. CUMONT in *J.R.S.*, XV (1925), 272-4, E. RIESS in *Am. Journ. Phil.*, XLVII, 191-7, J. M. CREED in *Journ. Theol. Stud.*, XXVII (1925), 77-81, L. FAHZ in *Or. Lit.-Z.*, 1925, 853 ff. (with a revised text of the prayer from the Mimaut papyrus which is the original of the end of the *Asclepius*); Vol. I by R. REITZENSTEIN in *Gnomon*, I (1925), 250-3, H. J. ROSE in *Class. Rev.*, XXXIX (1925), 133-5 (important as illustrating the kinship of the language of the *Corpus* with papyri); Vols. II and III by H. J. ROSE in *Class. Rev.*, XL, 204 f., and *J.R.S.*, XVI, 136 f.

A useful investigation has been made by F. BRAUNINGER, *Untersuchungen zu den Schriften des Hermes Trismegistos* (Diss. Berlin. Pp. 42. 1926), who carries further BOUSSER's separation of the dialogues into the Orientalizing group and the group akin to popular philosophy and studies specially IV and XIII.

J. RUSKA, *Tabula smaragdina; ein Beitrag zur Geschichte der hermetischen Literatur* (1926; Heidelberg. Pp. vii+246), publishes a Hermetic text on alchemy from the Arabic with full discussions.

A. D. NOCK, *A new edition of the Hermetic writings* (*Journal*, XI, 126-37), has criticized SCOTT's first volume, illustrated the element of popular philosophy in the *Corpus*, and given notes on various passages. I may be allowed to take this opportunity of withdrawing the conjecture there made on p. 512. 19 SCOTT. S. C. NEILL and A. D. NOCK, *Two notes on the Asclepius* (*Journ. Theol. Stud.*, XXVI, 173-7), date the interpolations in XXIV and XXV between 384 and 391, suggest an origin for them, and discuss ch. XXIII (on idols).

C. CLEMEN, *Religionsgeschichtliche Erklärung des neuen Testaments* (1924), 39-44, studies contact between Hermetism and Christianity.

R. REITZENSTEIN, in *Studien zum antiken Synkretismus aus Iran und Griechenland* (*Stud. d. Bibl. Warburg*, VII; 1926. Pp. 355), which he has produced in collaboration with H. H. SCHAEFER, argued that the *Poimandres* (of which he gives a revised text), the prophecy in the *Asclepius*, and the potter's oracle go back to Iranian originals⁴. On prophecies in general cf. W. WEBER, *Der Prophet und sein Gott* (*Beih.*

¹ In l. 77 he regards Ἀραβία as the name of the nome.

² À propos of p. 94 f. (victory of Christianity in superior δυνάμεις) note the Coptic combination in magic of the old religion and the new (LEXA, *La magie*, I, 143).

³ Perhaps I may be allowed to say that I am preparing a new edition in conjunction with A. BOULANGER, to appear in *Collection Budé*. We should be grateful for any notes other scholars may communicate to us.

⁴ He has some notes on Hermetism in *Gött. gel. Anz.*, 1924, 38 ff. also.

z. a. O., 3; 1925), M. P. NILSSON, *Deutsche Lit.-Z.*, 1926, 1085 ff., on the potter's oracle in particular¹, and C. C. McCOWN, *Hebrew and Egyptian Apocalyptic Literature* (*Harv. Theol. Rev.*, xviii (1925), 357-411), who discusses also the Dream of Nectanebus.

Magic. S. EITREM has laid students of this subject yet more heavily in his debt by *Papyri Osloenses*, Fasc. I. Edited by S. EITREM. Det Norske Videnskaps-Akademi i Oslo, Jacob Dybwad. 1925. Pp. 151. 13 plates. Commentary, etc. in English. This contains a long magical text and four short ones (including a Christian amulet published earlier), with a most illuminating commentary.

It has been reviewed by K. PREISENDANZ in *D. Lit.-Z.*, II (1926), 1705-8, and *Phil. Woch.*, XLVI, 401-7; L. DEUBNER in *Gnomon*, II, 406-12 (with some notes of his own); E. PETERSON in *Theol. Lit.-Z.*, 508-10; M. HOMBERT in *Revue belge de philologie*, v (1926), 546-7; A. D. NOCK in *Class. Rev.*, XL (1926), 26-7; from all who have criticized it, it has received the highest praise.

EITREM has published also P. Brit. Mus. CXXI verso col. I in *Journal*, XI, 80-3, not published by KENYON, from a copy made by H. I. BELL, with notes on readings, etc., and re-edited a fragment in KENYON's edition, p. 115; *Le papyrus Mimaut du Louvre* (*Raccolta Lumbroso*, 135-8), in which he corrects and completes from autopsy his edition in *Les pap. mag. gr. de Paris*, 24 ff., giving full text of fr. 4 of inventory (= fr. 1 of his ed.) as far as read, a *προγνωστικὴ τέχνη* addressed to Apollo, who plays the same rôle as in fr. 2 and 3, on which as on col. VIII (a further note on VII, 183 in *Symb. Oslo.*, III, 61²) EITREM contributes corrections; a note on Στέφανος in P. Par. 1846 (*Symb. Oslo.*, III, 75); notes on P. Leid. v (*Aegyptus*, VI, 117-20); and a valuable paper, *Die vier Elemente in der Mysterienweihe* (*Symb. Oslo.*, IV, 39-59, to be continued), explaining P. Par. 939 ff. in an illuminating way and throwing light on ritual rebirth in the mysteries.

C. C. EDGAR, *A Love Charm from the Fayoum* (*Bull. Soc. Arch. d'Alex.*, XXI (1925), 42-7), publishes a leaden tablet, Cairo Mus. 48217, not later than 3rd cent. A.D., with four small holes, probably to be attached, as in the charm formula in the Paris papyrus, to two wax figures, male and female, and laid in a tomb. The text is identical with P. Par. 355-84, which illustrates the diffusion of charms. K. PREISENDANZ remarks on it in *Gnomon*, II (1926), 191-2, and mentions an interesting Berlin text no. 13895, intended to produce a dream revelation.

J. ROHR, *Die okkulte Kraftbegriff im Altertum* (*Philologus, Supplementband*, XVII, Heft 1; pp. 133; 1923), is an important study of the *δυνάμεις* ascribed to various objects and of operations based on this concept.

E. PETERSON, *Engel- und Dämonennamen. Nomina barbara* (*Rhein. Mus.*, LXXV (1926), 393-422), gives a most serviceable list of demons in magical and astrological texts, etc.

K. FR. W. SCHMIDT, *Textkritische Bemerkungen zu den magischen Papyri* (*Symbolae Osloenses*, III (1925), 78-9), publishes textual notes on P. Bibl. Nat. 31 (EITREM, *Pap. mag. Paris*, 6) and P. Mimaut (*ibid.*, 24 ff.).

J. CIBULKA, *Le papyrus magique Leyl. V (J 384) et le "graffito" du Palatin* (*Strena Buliciana*; Zagreb, 1924. P. 729 f.), reads ✕ in col. iv, 32 (denied by PREISENDANZ *ap. W. WEBER, Ägypt.-griech. Terr.*, I, 175₁₅), and finds in the papyrus and in the graffito an identification of Christ and Seth; *cf.* earlier BLANCHET, *C. R. Ac. Inscr.*, 1920, 147 ff.

K. PREISENDANZ has published notes on charms from Cod. Par. gr. 2419 f. (*Byz.-neogr. Jahrb.*, III (1922), 276 f.), on P.S.I. 29 (*Raccolta Lumbroso*, 212-6; fuller publication of a man's charm to secure love of another man and vengeance on Paulus Julianus), on P. Oslo. 3 (*Symb. Oslo.*, III, 60-1), an important monograph *Akephalos der kopflose Gott* (*Beih. z. a. O.*, 8, 1926; pp. 80; 3 plates), which *inter alia* disputes the solar character of Seth-Typhon and the justifiability of WÜNSCH's application of the term *Sethianische Verfluchungstafeln* to most of his Roman *tabulae*, and argues that the ἀκέφαλος is Osiris, with astonishing command of most difficult material, and a good bibliography, *Die griechischen Zauberpapyri*, including a list of texts (*Archiv*, VIII, 104-67).

A. D. NOCK, *Magical Notes* (*Journal*, XI, 154-8), (1) analyses P. Par. 1716 ff., as an illustration of the accumulation of magical elements in a *πᾶσις*, (2) explains τὸ θεῖον μυστήριον in P. Berl. 9909 as the magic act, (3) recognizes ῥήγιθων in the form ῥήσιθων on an intaglio in *Cat. Wyndham Cook*, 55, no. 248 (*cf. φῶξ* for φῶς, Μίθραξ for Μίθρας, A. B. COOK, *Zeus*, I, 234, s for x in inscriptions at Carthage (DELATRE, *Bull. arch. com. travaux*, 1916, 138), and for ῥήγιθων P. Oslo. I, 154, 331, with EITREM's note, p. 133). In a note on Theocritus II, 38 (*Class. Rev.*, 1925, 18) he explains the emphasis or silence from magical considerations (add EITREM, *P. mag. de Paris*, 39, l. 45) and remarks on the magical use of mythological parallels

¹ A translation of this text by SCHUBART in GRESSMANN, *Altort. T. z. A.T.*,² (1926), 49 f., of the Egyptian parallels by RANKE, *ibid.*, 46 ff. For this oracle see also below, §§ 4 and 9.

² On this papyrus *cf.* also PREISENDANZ, *Akephalos*, 52-8.

(cf. LEXA, *La magie*, I, 53-6 for these in older Egyptian magic, 144 in Coptic magic)¹; in P. Leid. J 395, VII, 11, he defends γενέσθαι ἐν ὀνόματι πάντων (*Journ. Theol. Stud.*, XXV, 177); in *Notes on Beliefs and Myths* (*J.H.S.*, XLVI, 48 ff.) he discusses the two magical aspects of contact with earth and the parallelism of Hecate ritual and magic.

W. SCHUBART, *Or. Lit.-Z.*, XXVIII (1925), 646-7, reviews EITREM, *Les papyrus magiques de Paris*, and HOPFNER's great *Offenbarungszauber*; the former has been reviewed also by S. DE RICCI, *Rev. ét. gr.*, XXXVII (1924), 250-2 (*ibid.*, 253 on EITREM, *Zu den Berliner Zauberpapyri*, also reviewed by P. THOMSEN, *Phil. Woch.*, 1924, 1152), the latter by O. WEINREICH, *Phil. Woch.*, XLV, 795-804 (interesting and appreciative notice); its first volume by P. ALFARIC, *Rev. ét. anc.*, XXVII (1925), 165-6, both by A. DELATTE, *Revue belge de phil.*, V (1926), 549-52.

DORNSEIFF, *Das Alphabet*, has been reviewed by C. O. ZURETTI, *Boll. Fil. Cl.*, XXXII (1926), 271-2.

FR. LEXA, *La magie dans l'Égypte antique de l'ancien empire jusqu'à l'époque copte* (tome I, *Exposé*, pp. 220; tome II, *Les textes magiques*, pp. 235; tome III, *Atlas*, pp. ix and Pl. lxx), Geuthner, Paris, 1925 (£1. 12s. 6d.), is of the greatest value. It gives the earlier Egyptian and later Coptic material in convenient form, and discusses the whole theory and practice of Egyptian magic in a most illuminating way. His analysis of some Graeco-Roman texts (I, 155 ff.) is important and shows what has to be done in disentangling various elements in them.

A good translation of the *Pistis Sophia* has been given by C. SCHMIDT (Hinrichs, Leipzig, 1925. Pp. xcii+308). On pp. xxi ff. he discusses its affinities to magic texts². C. HORNER has reviewed his edition of the original, *Journal*, XI, 335 f.

W. R. DAWSON, *Bats as Materia Medica* (see § 5), deals *inter alia* with bats in magic. In *The Lore of the Hoopoe* (*The Ibis*, Jan. 1925, 31-9; July, 593 f.) he discusses medical and magical uses in Egyptian Greek and Coptic papyri.

For Germanic analogies to the magic of Graeco-Roman Egypt cf. FR. PFISTER, *Schwäbische Volksbrauche* (Augsburg, 1924), 44 ff.

Astrology. P.S.I. VII contains two horoscopes, 764, for 277 A.D., and 765, for 314 A.D. (?).

Catalogus codicum astrologicorum graecorum. Codices Athenienses descripsit ARMANDUS DELATTE. Tomus X. Pp. viii+291. Bruxelles, Lamertin, 1924 (25 fr.), contains a number of late texts, edited in masterly fashion. It has been reviewed by A. D. NOCK, *Class. Rev.*, XL (1926), 217 f.

BOLD-BEZOLD, *Stern Glaube und Sterndeutung, die Geschichte und Wesen der Astrologie*. Dritte Auflage nach des Verfassers Tod herausgegeben von W. GUNDEL. Teubner, Berlin, 1926. Pp. xii+211. 48 text figures. 20 plates, and a plan of the stars. A welcome re-edition of a fully documented study by a master of the subject.

H. GRESSMANN, *Die hellenistische Gestirnsreligion* (*Beil. z. a. O.*, 5; 1926. Pp. 32. 4 plates), gives an excellent sketch of the rise of astrology, well illustrated³. He mentions, p. 21, an Isis statuette with a fake-Egyptian inscription published in *Syria*, V, 49; cf. another in *Cut. Antiquities Weber* (Sotheby, 1919), 17, no. 148.

A. D. NOCK, *Journ. Theol. Stud.*, XXVI, 407 f., explains ἀνάρω in *C.C.A.G.*, VI, 76, as "place to which no man comes." It may however be for ἀπονάρω, "privy," as Professor H. J. ROSE has suggested (by letter).

F. H. COLSON, *The Week, an Essay on the origin and development of the seven day cycle* (Cambridge, 1926. Pp. viii+126. 5s.). A lucid and convincing book, which students of Christian beginnings cannot afford to neglect.

J. VOGT, *Die Alexandrinischen Münzen*, I, 10 f., 115 ff., connects the astronomical representations on coins of Alexandria under Pius with the rise of astrology. I note that at the same time (p. 116) he refuses to connect the order of the planets on coins of Pius with their order in governing the week.

A. SCHLACHTER, *Der Globus* (ΣΤΟΙΧΕΙΑ, VIII. Teubner. Pp. viii+118. 1926), herausgegeben von Dr. Friedrich GISINGER, is an exhaustive monograph which will no doubt be of much use.

Christianity. C. WESSELY, *Les plus anciens monuments du Christianisme écrits sur papyrus; textes édités, traduits, et annotés*, II, 1924. Pp. 345-508 (*Patrologia Orientalis*, XVIII, fasc. 3). A supplement to the previous series (1907), divided as follows: Introduction (includes a new text of cols. II and III of old no. 7,

¹ For Theoc., II, 28, cf. the parallel discussed in *Archiv für Religionswissenschaft*, XXIV, 172-3 (public envoûtement; cf. also the burning in effigy by officials of the Inquisition of offenders who had escaped).

² Cf. PREISENDANZ, *Akephalos*, 28.

³ On p. 24 by a common error he speaks of the snake-entwined deity found on the Janiculum as a goddess. Further cleaning since the discovery has revealed male genitalia; cf. R. PARIBENI, *Terme di Diocleziano*⁴, 121.

and adds 3 letters to the previous list, viz. P. Lond. 417, P. Oxy. 939, P. Lond. 891, all from WILCKEN's *Chrestomathie*; chap. I, Libelli libellaticorum, published since previous part; II, New Christian letters; III, This chapter is new and consists of Christian amulets. One in Bashmuriac is from WESSELY's own collection; IV (Also new), Liturgical fragments and prayers, including 11 unpublished Rainer papyri; V, Fragments of canonical books; VI, Miscellaneous texts of Christian literature. At the end a supplement with recently published texts. All are equipped with translation, commentary, bibliography, and an index of Biblical quotations. Praise of WESSELY is perhaps superfluous; this is naturally a standard work from the moment of publication. It has been reviewed by J. SIMON, *Anal. Boll.*, XLIII (1925), 377-9.

G. RUDBERG's *Septuaginta-Fragmente* has been reviewed by P. THOMSEN, *Phil. Week.*, XLV, 196. M. NORSÄ, *Papiri del Museo greco-romano di Alessandria* (*Bull. Soc. Arch. di Alex.*, XXII, 157-88), No. 1 is a register of bank-diagraphai dated A.D. 143/4. On the verso is Ps. lxxvii, 1-18. M. NORSÄ says "La scrittura sembra piuttosto della fine del secolo II che non del secolo III." If so, this is the earliest MS. of the Greek Psalter yet published. [See, however, § 3 below.] A number of texts will be found in P.S.I. VII, including no. 757, Ep. of Barnabas (IX, 1-6). 4th cent. (?). Folio of pap. codex. 758, Text perhaps (?) Christian. Unidentified. 3rd/4th cent. 759, Fragment of homily, unidentified. 5th cent. On the verso is beginning of Ps. xl (*cf.* P. Lond. 1928, etc., where this Ps. was used as an amulet), apparently unrecognized by the editors. 778, Libellus of Decian persecution, A.D. 250. Small fragment, probably from Fayyûm.

W. E. CRUM and H. G. EVELYN WHITE, *The Monastery of Epiphanius at Thebes* (see § 3). Part II contains some texts: 579-583 Biblical, 584-591 Patristic and Homiletic, 592-610 Liturgical.

P. Baden, Heft 4 (*cf.* § 3), includes 56 Exodus and Deut. (BILABEL regards as early 2nd cent.: but ?); 57 Romans; 58 Christian liturgy; 60 (tablet) Lord's Prayer; 65 (tablet) Christian text. BILABEL thinks 60 and 65 are in effect magical.

H. I. BELL and H. THOMPSON publish in *Journal*, XI, 241-6 (four plates), a Greek-Coptic glossary to Hosea and Amos.

J. A. JUNGSMANN, *Zwei Textergänzungen im literarischen Papyrus von Dér-Balyzeh* (*Zeitschr. f. Kath. Theol.*, XLVIII (1924), 465-71), makes two emendations of importance.

H. A. SANDERS, *An early papyrus fragment of Matthew in the Michigan Collection* (*Harv. Theol. Rev.*, XIX (1926), 215-226), publishes P. Mich. 1570, containing Mt. xxvi, 19 συνέταξεν—52 ἀπολογούνται, in a hand probably to be assigned to the 3rd century. The text is free from Antiochian, Alexandrian, and Caesarean revision and has affinities to the Western text, though lacking some of its readings.

C. SCHMIDT, *Das Koptische Didache-Fragment des British Museum* (*Z. neut. Wiss.*, XXIV (1925), 81-99), re-edits with commentary and translation the fragment published by HORNÉ, *Journ. Theol. Stud.*, 1924, 225 ff. He thinks the *Didache* was adapted to liturgical use in Egypt and that in consequence additions and omissions were made to fit it to this purpose, and discusses the bearing of the new fragment on textual problems. A. NEPPI MODONA, *Bilychnis*, II (1926), 3-16, also translates this fragment and discusses its value: the first part of the article is devoted to P. Lond. 2486 (Apology of Aristides). Reference may also be made to LIETZMANN's interesting treatment of the *Didache* in *Herrenmahl und Messe* (1926), 230-8.

I have not seen E. BUONAIUTI, *Detti extracanonici di Gesù*, Roma, 1924, mentioned in *Aegyptus*, V, 248.

E. SCHWARTZ, *Byz. Z.*, XXV (1925), 155-6, in a review (unfavourable) of *Licht vom Osten*¹ proposes a new restoration of the second Logion (P. Oxy. IV).

CAMPBELL BONNER, *A Papyrus codex of the Shepherd of Hermas* (*Harv. Theol. Rev.*, XVIII (1925), 115-27), discusses P. Mich. 917.

C. WESSELY, *Catalogus librorum saeculi V-VI p. Chr. n.* (*Festschrift zu Ehren Emil v. Ottenhals*, 2 pages), publishes, from a papyrus in his own possession, a list of books πεμφθ(έντων) τῷ ἀδελφῷ μου. They are all theological or liturgical.

K. STADE, *Der Politiker Diokletian und die letzte grosse Christenverfolgung* (Kommissionsverlag Hofbuchhandlung Heinrich Stadt, Wiesbaden. 1926. Pp. 197). In this substantial Frankfurt dissertation S. considers the evidence of Lactantius, sketches the general policy of Diocletian, and gives an excellent conspectus of dedications made by the Emperor and his magistrates (here Iuppiter Optimus Maximus, Hercules, Mars, and various forms of Genius predominate¹), by municipal magistrates (where local gods also appear), by private persons (more numerous because of the revival of prosperity due to Diocletian). He argues cogently, p. 106, that the dedication to Mithras at Carnuntum, *fautori imperii*, does not suffice

¹ The explanation, p. 97₁₂, of C.I.L., III, 11111, *Genio castrorum, I.O.M.*, as implying identification of Iuppiter with the Genius is probably right, *cf.* APTEMIS ΤΥΧΗ ΓΕΡΑΣΩΝ (*J.H.S.*, 1925, 92₆₃).

to prove a general favouring of the Eastern cult as affording a basis for absolutism, referring to Diocletian's express deprecation of the Persian origin of Manichaeism; p. 108, that the Emperor extended his patronage to all cults of importance; *ibid.*, that *Sol* is less prominent than *Iuppiter* in his coins and inscriptions, and that these show a Graeco-Roman, not an Oriental, conception of the gods; 111 f., that his conception of monarchy is Graeco-Roman as opposed to the *DEO ET DOMINO NATO* of Aurelian Probus and Carus¹; 114, Iouius and Herculius merely stress the close relation of the Emperor to the gods who protect him; 114 ff., this position of Hercules corresponded to old Greek thought. This emphasis on the Roman character of Diocletian's religious policy is salutary. In ch. II S. studies the opposition of pagan and Christian thought, emphasizing the dualism of the latter², their breach with ancient usage³, their unpatriotic attitude as prominent factors. The remaining chapters are devoted to the history of the persecutions from Decius onwards. The monograph seems to me excellent; it is a pity that the author is unacquainted with the investigations of N. H. BAYNES.

A. JULICHER, *Zur Geschichte der Monophysitenkirche* (Z. neut. Wiss., xxiv (1925), 17-43). After a brief appreciation of MASPERO's *Histoire des Patriarches d'Alexandrie* he deals in detail with two important points on which he thinks MASPERO has gone entirely wrong. (1) M.'s conjecture of a Monophysite Patriarch named Johannes about 620 and his theory in connexion with this as to the date of Anastasius Sinaita and the *Entstehungsverhältnisse* of his *Hodegos*. He regards Johannes as "eine pure Schaumgeburt" and rejects MASPERO's theory as to Anastasius, which H. I. BELL informs me he also regarded as very weak. (2) M.'s theories as to the confused period 566-75. JULICHER proposes an alternative conjectural reconstruction.

J. LINDBLOM, *Altchristliche Kreuzessymbolik. Einige Bemerkungen zu einer Stelle der Bellschen Papyrus-edition von 1924* (*Studia Orientalia* [Soc. Orient. Fennica], I *Commentationes in honorem Knut Tallquist*, Helsingforsiae, 1925. Pp. 102-13). On the phrase *ὡς τοῦ πῶς σταυρῶ* (= *ὡς τύπος σταυροῦ*) in P. Lond. 1917. Shows that this idea, that the stretching out of the hands in prayer typified the Cross, was fairly common among early Christian writers, and traces many similar fancies (e.g. horns of an ox, letter T, nose and eyes in human face, etc.). In general for literature relating to H. I. BELL, *Jews and Christians*, cf. § 3; a popular account of Athanasius with use of the new material is given by H. I. BELL, *Athanasius: a chapter in Church History* (*The Congregational Quarterly*, III (1925), 158-76). N. H. BAYNES, *Athanasiana* (*Journal*, xi (1925), 58-69), § 1, *The Recall of Arius from Exile*. The letter of November 27 *sine anno* from Constantine to Arius was A.D. 333. Probably in late 334 Constantine wrote to Athanasius to receive Arius into communion. § 2, *An Athanasian forgery?* Rejects SEECK's theory that the crucial letter from Constantine summoning the bishops from Council of Tyre was a forgery by Athanasius. Explains discrepancies between our three versions; that in *Apologia c. Arianos*, 86, probably edited by Athanasius. § 3, *The Return of Athanasius from his first Exile*. Constantine wrote to Alex. announcing Athanasius' restoration, June 17, 337. Massacre of Constantine's family, summer 337. The three brothers met in 337 and Ath. then met Constantius at Viminacium. Can hardly then have reached Alexandria early in November 337. He arrived in Alexandria after meeting Constantius a second time at Caesarea on November 23, 338.

Subsidia. Mention must here be made of the religious importance of J. VOGT, *Die Alexandrinischen Münzen* (cf. § 4), a minute historical survey of the coins struck under the Empire at Alexandria. This is extremely instructive⁴ and readable, a worthy continuation of the work of WILHELM WEBER, to whom it is dedicated; and a contribution of very high value to the religious history of the Empire. VOGT has summarized his views in *Römische Politik in Ägypten* (cf. § 4). J. G. MILNE has made some pertinent criticisms of the smaller work in *Journal*, xi, 346-7.

From VOGT we have also the publication of the Graeco-Roman terracottas of the Sammlung Sieglin

¹ Herein Julian is his heir; cf. Sallustius, *Περὶ θεῶν καὶ κόσμου*, xviii, and A. D. Nock's edition, lxxxix₂₁₀. The praise of Diocletian in *Hist. Aug., Anton.* 19.12 is very suitable if we hold with N. H. BAYNES that it was written under Julian.

² Cf. A. D. Nock, *Sallustius*, lxxix₁₇₇.

³ He notes, p. 127, what Porphyry says of Jesus as becoming a god in his *Ἐκ λογίων φιλοσοφία*. It should be noted that this was an early work of Porphyry's; he had not then considered the matter as much as he did later.

⁴ Note, for instance, his remarks on the festival of *Κράτῃσις* on August 1, p. 39 f.; on the riding Agathos Daimon, 52 f.; on Domitian, 53-5; on nome-types, 58 ff.; on Trajan's policy, 72 f.; on Hadrian, 97 ff., and in particular 110 f.; on archaism, 120 ff.; on conditions under Marcus, 145 ff.; on Caracalla, 171 f. (cf. *J.H.S.*, 1925, 89, and E. BIEKERMANN, *Das Edikt des Kaisers Caracalla in P. Giss.* 40, Diss. Berlin, 1926. P. 6 f.); on Elagabalus, 178 ff.

(*Die Griechisch-ägyptische Sammlung E. v. Sieglin*, II, *Terrakotten*. Leipzig, 1924. Text vol. and Plates vol. 90 M.).

This handsomely illustrated work will take its place beside the great works of WEBER and PERDRIZET¹. *Inter alia* VOGT notes the continued popularity of old Egyptian deities (cf. his *Alex. M.*, I, 7, 57, and EITREM, *P. Oslo.*, I, p. 56), inferior, of course, to what may be called the Graeco-Egyptian deities.

W. DEONNA, *Terres cuites gréco-égyptiennes* (*Revue archéologique*, XX, 1924, 80 ff.), catalogues the terracottas of this class in the museum of Geneva. His religious commentary is most useful, notably pp. 96 ff. on Egyptian influence in Gaul.

3. PUBLICATIONS OF NON-LITERARY TEXTS.

(*N.B.* Miscellaneous notes and corrections of documents previously published are placed in § 9 below.

Reviews are noticed in the present section.)

It is matter for gratification that the heavy loss suffered by papyrology through the death of PREISIGKE is being in part repaired by the labours of F. BLABEL and E. KIESSLING, who are carrying on some of the publications undertaken by him. The former has now produced Part I of the third volume of the S.B., that valuable collection of texts previously published in periodicals or elsewhere and unindexed. The new part, which is arranged on the same lines as the others, shows signs of haste in places and some overlapping, but represents a vast amount of labour and will be of immense utility. *Sammlung Griechischer Urkunden aus Ägypten*. Berlin und Leipzig, Walter de Gruyter, 1926. Pp. vii, 1-151 (nos. 6001-824).

A selection of papyrus texts, published some years ago by R. HELBIG, has now reached a second edition, but is known to me only through favourable reviews by M. DIBELIUS (*Theol. Lit.-Z.*, I, 1925, 512-13) and K. FR. W. SCHMIDT (*Phil. Woch.*, XLV, 1925, 438-9). *Auswahl aus griechischen Papyri* (Sammlung Göschen 625). 2nd ed. Berlin und Leipzig, Walter de Gruyter, 1924. Pp. 132. Mk. 1.25.

One of the great events of the period under review is the publication by C. C. EDGAR of the 1st volume of a complete catalogue of the Zeno papyri at Cairo. The extent of this archive may be gauged from the fact that this volume, containing 139 texts arranged chronologically, brings down the Cairo papyri, which are only a part, though the largest part in any one Museum, of the whole archive, no further than the 29th year of Philadelphus, just after Zeno's settlement at Philadelphia. The volume, which is uniform with the other volumes of the Cairo Catalogue, is sumptuously produced and is rendered particularly valuable by the inclusion of 24 facsimiles, several of which are excellent, though others are less successful. It has separate indexes. Many of the texts have previously been published in the *Annales*, but there are many not previously known. The quality of the editing needs no emphasizing for those acquainted with EDGAR's work. The commentaries are brief but to the point. *Catalogue général des antiquités égyptiennes du Musée du Caire*. Nos. 59001-59139. *Zenon Papyri*. Volume I. Le Caire, Impr. de l'Inst. Français d'Arch. Or., 1925. Pp. viii+183. 24 plates. The volume is reviewed, along with P. Edgar 89-111, previously published in the *Annales*, by WILCKEN (*Archiv*, VIII, 66-9). [Since the above was written I have received Vol. II (1926. Pp. viii+207. 30 plates) of EDGAR's Catalogue. It contains nos. 59140-59297 and covers the period from the beginning of year 30 to the end of year 35.]

I may mention here that a further large collection of Zeno papyri has recently been acquired in joint purchase by the British Museum and the Universities of Michigan and Columbia, and that the two latter institutions have subsequently purchased a considerable number of others from a different source. Those assigned to the British Museum are destined, along with their predecessors, for Vol. VI of the Museum Catalogue; the Michigan ones are to be edited by EDGAR, and those of Columbia by WESTERMANN.

In addition to EDGAR's handsome volume, a number of Zeno papyri have appeared elsewhere, either singly or in volumes of miscellaneous texts. One which, though not itself of great importance, is interesting because it brings down Zeno's life to a later date than has previously been suspected, has been edited by HUNT. It is a list of arrears of taxes, with a copy of a letter from Achoapis to Ptolemaeus dated Choiach 28 in the 18th year (of Euergetes). Zeno himself is recorded as owing 169 dr. 4 obols for the 16th and 17th years, a sum which indicates that he was a landowner of importance. *A Zenon Papyrus at Corpus Christi College, Cambridge*, in *Journal*, XII (1926), 113-5.

An interesting petition to Zeno and Nestor from a musician regarding an instrument bequeathed him by his instructor, but deposited as security for a debt, has been published from a papyrus in the British Museum, along with a fragment relating to the same subject from the Cairo collection, by H. I. BELL. *A Musical Competition in the Third Century B.C.*, in the *Raccolta Lombroso* (see § 10 below), 13-22. TH.

¹ On one female type cf. PETERSON, ΕΙΣ ΘΕΟΣ, 88 f.

REINACH calls attention to this document, which he translates into French, suggesting, on the evidence of the Cairo fragment, that the petitioner obtained the place of teacher of the cithara at the gymnasium of Philadelphia in place of his instructor Demeas. *Les doléances d'un professeur de musique il y a 2000 ans*, in *Rev. de Musicologie*, IX (1925), 145-7. BELL's edition is reviewed by WILCKEN (*Archiv*, VIII, 72-4). I may mention that through the courtesy of Mr. EDGAR and Prof. KELSEY the missing right side of the papyrus has recently been acquired by the British Museum from the Cairo and Michigan collections. A revised text will be published in P. Lond. VI.

WILCKEN also reviews the Cornell Zeno papyrus edited by WESTERMANN (see *Journal*, XI, 93), *ibid.*, 69-72. This papyrus is apparently republished in a volume edited by W. L. WESTERMANN and C. J. KRAEMER which is clearly of considerable importance and to which, as the first American volume of non-literary papyrus texts since the appearance of the Goodspeed papyri, a hearty welcome must be given. It seems to contain mainly texts of the Roman period, but at present I know it only from a useful review, with valuable corrections, by G. VITELLI (*Da papiri greci dell' Egitto*, in *Studi ital. di fil. class.*, N.S., v, 3-11). *Greek Papyri in the Library of Cornell University*. New York, Col. Univ. Press, 1926. Pp. 287. 19 plates. [I have received the volume since this article went to press.]

WESTERMANN also publishes a Zeno papyrus (P. Col. Inv. No. 12) of 256 B.C., a letter to Zeno about the exemption of orchards [from apomoirā?]. See below, § 5.

Thirteen Zeno texts were included in the third and concluding part of P. M. MEYER's edition of the Hamburg papyri (see *Journal*, XI, 94). Reviews of this volume, additional to those noted at the last reference, have been published by PRINGSHEIM (*Vierteljahrsschr. f. Soc. u. Wirtsch.-Gesch.*, XVIII, 1925, 403-4), SCHUBART (*Gnomon*, II, 1926, 744-5), and WESTERMANN (*Class. Phil.*, XX, 1925, 176-7).

Sixteen further Zeno texts appear in P.S.I. VII, which has been published since my last bibliography. They are all more or less incomplete, and include no text of outstanding importance, though they offer points of interest. Apart from them and a number of literary texts, noticed above in § 1, the volume contains chiefly documents of the Roman period, though there are some Byzantine. Many of the best were presented by Prof. CAPOVILLA; the others came from the old stocks of the society, and were acquired partly by excavation at Ashmunên and Behneseh and partly by purchase. On the whole, the volume is distinctly inferior in the interest and importance of its contents (though not in the quality of the editorial work) to its predecessors; among the more noteworthy documents may be mentioned: 731, 732, epicrisis declarations; 733, accounts for the crown-tax, A.D. 235; 734, oath of potamophylakes; 737, a petition concerning fishing, which might be of some interest if it were in better condition (compare also 735, accounts of inspectors of the fisheries, and 798); 741, a letter which illustrates the slump in the currency in the 4th cent.; 767, a juristically interesting petition; 770, a sale of land at Nikiu; 776, with a puzzling text on the verso; 787, a lease of a mill; 804, an interesting request to take over the writer's place as prytanis; some good accounts (812, 820, etc.) and letters (824, 831, 843); 870, fragments of official correspondence. *Pubbl. d. Soc. Ital. p. l. ricerca d. papiri greci e latini in Egitto: Papiri Greci e Latini*, VII (nos. 731-870). Firenze, E. Ariani, 1925. Pp. xiii+231.

Besides the above volume, the first part of Vol. VIII (Firenze, *Libreria Internazionale*, 1925. Pp. 88. 3 plates), which, unlike its predecessors, is being issued by instalments, has also appeared. It contains further Capovilla papyri and adds to these a number of papyri in the Cairo Museum, permission to publish which was granted by the authorities, and a small but very fine collection of papyri in the possession of King Fuad I. Among the Cairo papyri are: 871, an interesting application to register a change of address consequent on apprenticeship; 872, a petition to the Defensor of Oxyrhynchus; 873, a noteworthy agreement with comarchs to go and work at Babylon (in Egypt) on behalf of the village of Theadelphia, no doubt as a liturgist, showing, in the year 299, a system similar to that in use during the early Arab period; 876, a petition to proximi, showing that these officials had some sort of judicial function; 883, revealing the existence of a single strategus for Themistes and Polemon in July, 137; 886, concerning the supply of military boots; and 889, an interesting though very imperfect Byzantine letter. The Fuad papyri form part of the very remarkable archive discovered a few years ago on the site of Tebtunis and dating from the period Augustus-Gaius. The greater part of it was acquired by the University of Michigan, but it appears that a portion came into the royal library, and these documents have been published by the Società Italiana. They are all of considerable interest from several points of view; among them special mention may be made of the following: 901, a very interesting oath of fishers not to catch sacred fish (the nomarch has the title ἐπὶ τῶν προσόδων καὶ ἐπὶ τοῦ ἐπιδασμοῦ); 902, a contract for work by a weaver; 903, an interesting division of slaves (the personal name Ἀραβάρχης is noticeable; cf. O. Strassb. 525, 11); 907, a

sale of half a house illustrating the excessive subdivision of such property ; 908, showing that *Δρουσιεύς* was Epeiph ; and 909, a fine bilingual sale, the Demotic text of which is edited by SPIEGELBERG. The part concludes with two remarkable novelties. The first (919) is a very fine drawing (Pl. ii) of Cupid and Psyche (2nd cent. ?), the second (Pl. iii) a crude but none the less interesting drawing of Christ and his disciples on the Sea of Galilee. Altogether this part, though not up to the same level of interest as Vols. iv and v, ranks among the best of the Society's publications. It and Vol. vii are reviewed by WILCKEN in *Archiv*, viii, 81-7.

In order to notice the publications of the Società Italiana together, I have departed from strict chronological order, but now return to the Ptolemaic period. WILCKEN's *U.P.Z.* has been reviewed by P. M. MEYER (*Z. vergl. Rechtsw.*, xli, 287-91, Part iii), E. KORNEMANN (*Klio*, xx, 1925-6, 245-7, all three), W. SCHUBART (*Or. Lit.-Z.*, xxviii, 1925, 646, Part iii), and H. I. BELL (*Gnomon*, ii, 1926, 561-9, all three).

P. COLLART and P. JOUGUET collaborate in the publication of four papyri of the 3rd cent. B.C. derived from the Ghorân cartonnage. All four come from one mummy. They are as follows:—1. Letter of Cresilaus to Artemidorus, on the sale of a cargo of incense. Year 39 of Philadelphus. The editors add a very interesting and valuable discussion of the trade in and monopoly of incense. 2. Letter of Philo to Cresilaus, concerning delay in the inspection of the vintage for the *ἡμσεύματα*. Year 4 of Euergetes I. Interesting. 3. Letter of Diocles, agent of Sosibius, to Ammonius. Year 5. The editors identify Sosibius with the man who occurs in P. Edgar 63 and with the Sosibius known to history as the minister of Philopator. They suggest that he was dioecetes in year 5. Here his agent intervenes to procure the release of his *κυβερνήτης*, detained *δι' αἰτιά[ν] τυ[ά] βραχέαν*. 4. Letter of Horus to Cresilaus, on a failure of the bank to supply *μισθός* to the *λαοί* engaged on the dykes. *Petites recherches sur l'économie politique des Lagides*, in *Raccolta Lumbroso*, 109-34. This publication is reviewed by WILCKEN (*Archiv*, viii, 75-6).

P. Lille I, Part iii is reviewed by S. DE RICCI (*Rev. ét. gr.*, xxxvii, 1924, 252-3).

The subject of incense, mentioned above, also comes to the fore in an article by WILCKEN, in which he publishes a very interesting, though fragmentary, papyrus of the early 2nd cent. B.C. (P. Berl. 5883 + 5853). This is a loan of money by a capitalist to five men who undertake a voyage to Punt (*ἡ Ἀρωματόφορος*) to buy *ἀρώματα*. The loan is apparently without interest, but WILCKEN suggests that the creditor had a share in the profits, if any. In the course of his commentary he discusses the spice trade, the monopoly, etc. The list of borrowers and their sureties is itself of great interest. Among the borrowers are a Massaliot and a Lacedaemonian, and the sureties are a Thessalonian, an Elean, a Massaliot named Kintos (a Celtic name), a Carthaginian, and another Kintos, apparently not a Massaliot. *Punt-Fahrten in der Ptolemäerzeit*, in *Zeitschr. f. äg. Spr.*, lx (1925), 86-102.

In the course of a long article in which he treats afresh, both in the way of commentary and with proposals for new readings or restorations, a number of miscellaneous papyri (see below, § 9), CRÖNERT publishes a papyrus of the Cleon archive (P. Lond. 593) of which hitherto only the beginning had been published. *Raccolta Lumbroso*, 530-3. WILCKEN reviews this publication in *Archiv*, viii, 74.

C. C. EDGAR publishes an interesting papyrus found among the Zeno fragments and sent him by VITELLI. Though of the Ptolemaic period, it does not belong to the Zeno archive, being later in date, but it probably comes from Philadelphia. It contains the minutes and accounts of a convivial club, probably composed of servants. The president had the title of *ἐπιμελητής*, and one member that of *ἱεροποιός*. Payments are recorded to an *αἰλητής* and a *κίναϊδος*. The place of meeting is recorded, as also the members present. *Records of a village club*, in *Raccolta Lumbroso*, 369-76. Reviewed by WILCKEN (*Archiv*, viii, 77-8).

O. KRÜGER publishes from the Moscow collection a papyrus which has an at least indirect connexion with the Theban revolt of 88 B.C. This is a letter from "Plato the younger" (presumably a relative—qu. the brother?—of the Plato already known in this connexion) to "the elders at Pathyris" about a donkey and her colt belonging to the epistates of the Eileithyopolite nome. The letter is dated 15 Athyr of the 30th year (= 88 B.C.). *Zum thebanischen Aufstand von 88 v. Chr.*, in *Raccolta Lumbroso*, 316-8. Reviewed by WILCKEN (*Archiv*, viii, 78-9).

Among WILCKEN's reviews in *Archiv*, viii, besides those mentioned above, the following deal with papyri of the Ptolemaic age:—Pp. 76-7 on COLLART and JOUGUET's *Bail de verger* (see *Journal*, xi, 94); p. 77 on BILABEL's publication (*Aegyptus*, vi, 107-13) of two "double deeds" in his article on this class of document, for which see below, § 6.

H. LEWALD has found a small fragment which contains the beginnings of ll. 8-16 of P. Grad. I, and republishes this portion of the text with the new fragment and revised readings. *Sul papiro Gradenwitz I*, in *Raccolta Lumbroso*, 340-2. Reviewed by WILCKEN (*Archiv*, viii, 74-5).

VIERECK's edition of the Strassburg ostraca has been reviewed by M. ROSTOVITZEFF (*Gnomon*, II, 1926, 173-4; high praise), G. D[E] S[ANCTIS] (*Riv. di Fil.*, N.S., III, 1925, 387; laudatory), and J. G. WINTER (*Class. Weekly*, XVIII, 1925, 101).

FR. BILABEL has issued Part IV of P. Bad. The texts here published represent in part the finds made during the excavations at Karāra and Hibeh in 1914, in part earlier acquisitions of the Heidelberg library. Some of the most notable of them fall under §§ 1 and 2 above: those which belong to the present section are not of outstanding interest, though there are a few texts above the average and interesting features in others. There are several Ptolemaic texts: 47, an official letter concerning a soldier's pay; 48, an interesting private letter about a law case (note ἀποσκευή as = "family"), and others. The majority are however of the Roman or Byzantine period. Among the better texts may be mentioned: 54, an inventory of church property (5th cent.); 55, a sale of wine in advance; 72, a petition in a law case; 74, the document previously edited by BILABEL as establishing the Greek name of Hibeh; 75*a* and *b*, census declarations; 89, a very notable though unfortunately imperfect text containing regulations for the cult of Severus Alexander and Julia Mamaea at Hermopolis; 93, a 7th cent. list which would be of extraordinary interest were it really, as BILABEL takes it, one of ephebi, but he is quite certainly wrong; and 94, a rather interesting and very lengthy account of about the 5th century, the editing of which, it must be confessed, leaves something to be desired. Indeed, BILABEL seems less at home with the Byzantine documents than with those of an earlier age. The volume concludes with some ostraca. *Veröffentlichungen aus den badischen Papyrus-Sammlungen*. Heft 4. *Griechische Papyri (Urkunden, Briefe, Schreibtafeln, Ostraka, etc.)*. Heidelberg, Selbstverlag des Verfassers, 1924. Pp. 180. 2 plates. The volume has been reviewed by WILCKEN (*Archiv*, VIII, 88-92), SCHUBART (*Gnomon*, II, 1926, 232-5; appreciative but critical; thinks the work suffers from haste), and CALDERINI (*Aegyptus*, VI, 1925, 281).

M. HOMBERT has published a number of papyrus texts drawn partly from the Ghent collection and partly from that at the Sorbonne. His editorial work is good and it is matter for congratulation that papyrology at Brussels University is in such capable hands. The Ghent texts include: 1, the important papyrus previously printed in the Appendix to P. Ryl. II as a revision (without consultation of the original) of the very unsatisfactory *editio princeps*, here further revised from the MS. and with additions; 3, a certificate of sitologi; 5, a letter about an arbitration, very imperfect; 7, an Aphroditopapyrus. The Sorbonne texts, which are the more interesting, include: 8, a register of official correspondence of the 3rd cent. B.C., from the Fayyūm but apparently not from the Zeno archive; and 11-13, three more documents dealing with the *νεκροτάφοι* of the Great Oasis. There are indexes of personal and geographical names and of words. *Quelques papyrus des collections de Gand et de Paris*, in *Rev. belge de phil.*, IV (1925), 633-76. 3 plates. Reviewed by A. CALDERINI (*Aegyptus*, VII, 164-5).

A useful publication of papyrus texts at Giessen is due to H. KLING. These papyri belong to the University Library, and are apparently to be referred to as "P. bibl. univ. Giss.," to distinguish them from "P. Giss.," which are preserved in the Museum of the Oberhessischer Geschichtsverein. Those here published include ten of the Ptolemaic period and six of the Roman. They are none of them documents of great importance, but they offer various points of interest, which KLING well brings out, giving good promise of his future as an editor of papyri. Mention may be made of: 2, concerning the illicit importation and sacrifice of pigs; 5, illustrating the employment of Egyptians in the army, perhaps in the war between Euergetes II and Cleopatra II; 10, including an interesting list of articles; 13 (90 A.D.), containing a reference to ἐπιγραφή ἀπίπου; 14, a census return; 16, an interesting fragment which, if WILCKEN's supplements are correct, concerns a festival in honour of the *praefecti praetorio* and the prefect of Egypt. All were acquired from a Cairo dealer in 1913. A later instalment is to contain papyri previously published, and indexes will follow in the third part. *Schriften der Hess. Hochschulen, Univ. Giessen*, 1924, Heft 4, *Mitteilungen aus der Papyrusammlung der Giessener Universitätsbibliothek*. I. *Griechische Papyrusurkunden aus ptolemäischer und römischer Zeit (P. bibl. univ. Giss. 1-16)*. Giessen, A. Töpelmann, 1924. Pp. 38. Reviewed by WILCKEN (*Archiv*, VIII, 79-81), E. PETERSON (*Theol. Lit.-Z.*, I, 1925, 529-30; with special reference to the linguistic interest for theologians), and K. FR. W. SCHMIDT (*Phil. Woch.*, XLV, 1925, 1219-20).

The papyri at Jena, together with some documents of the late Middle Ages, have been published, with facsimiles of all, by FR. ZÜCKER (for the papyri) and FR. SCHNEIDER (the mediaeval documents) in a small volume which is interesting not only for its contents but for its form, since it was produced by a new and very cheap process known as the "Manuldruckverfahren." This process seems to offer great possibilities, since a facsimile even of a papyrus can be made direct from the original without photography in the

ordinary sense, and at a fraction of the usual cost. The results, where the original is defaced, are not altogether happy, but in the case of a well preserved papyrus the process seems satisfactory enough. The papyri number four, all of them of some interest. They are: 1, a letter of Cleosthenes to Pythoneus, connected with P. Hal. 7 and 8, 231 B.C.; 2, receipts for tax payments (nomarchic taxes), A.D. 214-5; 3, lease of land in the Hermopolite nome, A.D. 477; 4, a letter of the 5th-6th cent. *Jenauer Papyrus-urkunden und spätmittelalterliche Urkunden nebst den ersten Universitätsordnungen und Statuten vom Jahre 1548*. Zwickau i. Sa., F. Allmann, 1926. Seminar f. Kl. Phil. Jena. Pp. 8. 10 facsimiles. Mk. 2 8.

A new volume of B.G.U. has arrived just in time for inclusion in this bibliography, though not in time to receive the study which it calls for. Thus, the seventh, edited by P. VIERECK and FR. ZÜCKER, contains the papyri, ostraca and waxed tablets found by the editors at Darb el-Gerza, the ancient Philadelphia, during the excavations of 1908-9. It is sad, by the way, to reflect that they must have been within a very little of discovering the Zeno papyri, which, had they fallen into the hands of European excavators, would have escaped being scattered to the four winds, not without loss and damage.) Apart from a group of ostraca belonging to the 3rd cent. B.C., the documents all date from the Roman or, to a less extent, the Byzantine periods. There is an interesting group of Latin waxed tablets, dating from the 2nd century. A valuable account of the ruins of Philadelphia is prefixed, and the commentaries are more elaborate, the whole production of the volume less parsimonious, than was found necessary for Vol. VI. There are even five plates, two of them plans, one a photograph and reconstruction of part of the temple, and the other two facsimiles of two ostraca and a waxed tablet respectively. *Ägyptische Urkunden aus den staatlichen Museen zu Berlin: Griechische Urkunden*, VII Band, *Papyri Ostraka und Wachstafeln aus Philadelphia im Fayûm*. Berlin, Weidmann, 1926. Pp. iv+276. 5 Plates.

Several of the publications noticed above consist only in part of Ptolemaic documents. I come now to those which are purely Roman.

B. OLSSON has published a most useful and excellently edited collection of the private letters of the early Roman period (to the end of the 1st cent.). Eighty letters are here collected from various sources, edited in handy form, often with improved readings, and furnished with translations and commentary. The volume gives proof of wide reading and a very acute judgement, and it is to be hoped that the editor will some day follow it up with a similar collection of later letters. *Papyrusbriefe aus der frühesten Römerzeit*. Uppsala, Almqvist & Wiksell, 1925. Pp. xii+240. Inaug.-Diss. The volume has been much reviewed: by A. DEBRUNNEN (*Theol. Lit.-Z.*, I, 1925, 488-9), K. FR. W. SCHMIDT (*G.G.A.*, CLXXXVIII, 1926, 44-50; many suggestions), J. MOFFATT (*Expositor*, 1925, 317-8), G. GHEDINI (*Aegyptus*, VI, 1925, 277-9; favourable; some suggestions), G. DE SANCTIS (*Riv. di Fil.*, N.S., III, 1925, 560-2; favourable), FR. ZÜCKER (*D. Lit.-Z.*, N.F., II, 1925, 1800-2; critical but appreciative), and H. I. BELL (*Class. Rev.*, XI, 1926, 139; *Journal*, XII, 1926, 318-9).

The British Museum publication, *Jews and Christians in Egypt* (see *Journal*, XI, 94 f.), has continued to attract a great deal of attention. Many of the articles on this subject, which deal with historical questions raised by the letter of Claudius or the later documents, belong more strictly to § 4 or § 2, but I have collected here all those which are in the nature of reviews, leaving to § 4 those which merely discuss single historical problems. I give a list (not systematically arranged) of the articles in question with brief indication of their nature. P. JOUGUET in *Journal des savants*, N.S., XXIII (1925), 5-19 (review; occupied entirely with the letter of Claudius); A. STEIN, *Parteilämpfe im hellenistischen Alexandria* (*Neues aus vergilbten Papyrusblättern*, in *Preuss. Jahrbücher*, 1925, 54-73 (very interesting synopsis and discussion of the Claudius letter, holds that the Jews were not citizens and that the senate was not abolished by Augustus); R. LAQUEUR, *Der Brief des Kaisers Claudius an die Alexandriner*, in *Klio*, XX (1925), 89-106 (an ingenious but in my opinion fantastic and quite unconvincing analysis of the letter. He finds in its composition two distinct stages: at first Claudius answered the embassy by accepting the Alexandrian offers, granting some requests, and assuming a quite impartial attitude as regards the Jews, which in effect meant deciding against the Alexandrines, but then a Jewish embassy arrived and annoyed Claudius, who became anti-Jewish, inserted some anti-Jewish passages, and made of his own motion requests for further honours. The passage about introducing Jews from Syria and Egypt refers to Rome, not Alexandria, and ἀλλοτρία πόλεις means Rome. This in a letter addressed to Alexandria!); M. HOMBERT in *Rev. belge de phil.*, IV (1925), 197-203 (review); F. G. KENYON, *The Jews in Roman Egypt*, in *Edinburgh Review*, July, 1925, 32-47 (review, with interesting discussion of the Roman government's policy towards the Jews); G. MÉACTIS, *Recherchements nouvelles sur l'histoire ancienne*, in *Revue de France*, V (1925), 202-8 (brief résumé, translating portions); H. GRÉGOIRE in *Byzantion*, I, 638-47 (review; rather favours the

view [see § 4 below] of S. REINACH and DE SANCTIS as to Christianity; thinks the Athanasian authorship of the last letter at least possible); SCHUBART in *Gnomon*, I (1925), 24-37 (review; important, with useful corrections; on p. 29. note 1, *αἰρημάτων* is right. He holds that Alexander gave Alexandria no senate, perhaps because he died too soon, but later Alexandria possibly obtained a senate without authorization, which was afterwards suppressed, perhaps by Energetes II.); G. GHEDINI, *Il più antico documento riguardante il cristianesimo*, in *Scuola Cattolica*, S. VI, V (1925), 369-76, and *Laici nati dai papiri sullo scisma meletiano e il monachismo in Egitto*, *ibid.*, S. VI, VI (1925), 261-80 (review in two parts; in the first he agrees with DE SANCTIS as to the citizenship of the Jews and also partially as to the suggestion about Christianity, adding however, "ma non è che ipotesi, e purtroppo, a mio avviso, non necessaria a spiegare anche la chiusa della lettera"; in the second he deals with the Christian letters, with interesting remarks on the organization of the Meletian monastery. He thinks the writer of the last letter was perhaps not the great Athanasius. He has references to other articles, some of which are not accessible to me); M. RADIN in *Class. Phil.*, XX (1925), 368-75 (review; interesting and with valuable material from the Jewish side); W. OTTO in *Phil. Work.*, XLVI (1926), 6-15 (review; interesting and valuable; thinks that Alexandria had a senate, abolished by Augustus, and that [as WILLRICH independently suggested, see § 4] there were two Jewish embassies); E. STAVE, *Judar och Kristna i Egypten*, in *Kyrkohistorisk Årsskrift*, XXIV (1924), 363-71 (review); EV. BRECCIA in *Bull. Soc. Arch. d'Alex.*, part 21 (1925), 117-30 (review; rejects S. REINACH's view as to Christianity, as also on the whole that of DE SANCTIS, but is inclined to agree with LAQUEUR except as regards the supposed reference to Jews in Rome); H. VON SODEN in *Theol. Lit.-Z.*, L (1925), 251-3 (review; decisively rejects S. REINACH's view, also the Athanasian authorship of the last letter); ADHÉMER D'ALÈS in *Rev. ét. gr.*, XXXVIII (1925), 112-4 (review); G. GHEDINI in *Aegyptus*, VI (1925), 273-7 (review); P. P[ETERS] in *Anal. Boll.*, XLIII (1925), 140-3 (review); H. B[OLKSTEIN] in *Tijdschr. v. Gesch.*, XL (1925), 282-3 (review); F. GAVIN in *Anglican Theol. Rev.* (Berkeley Div. School, Connecticut), IX (1926), 182-5 (review); D. DE BRUYNE in *Rev. bénéd.*, 1925, 134-5 (review; does not believe, despite the evidence to the contrary in P. Lond. 1914, that the Meletian accusations against Athanasius had any foundation); A. DONINI in *Ricerche religiose*, 1925, I, 150-6 (review; not accessible to me).

While on the subject of the Jews, I may just mention, though this comes under the head of epigraphy, a publication by G. LEFEBVRE of four Jewish funerary stelae obtained at Chirib el-Kanafir, three at least from Tell el-Yahudiyyeh, though the fourth may have a different provenance. All are of the time of Augustus. *Inscriptions gréco-juives*, in *Ann. du Service*, XXIV (1924), 1-5. N. AIMÉ-GIRON publishes three Aramaic ostraca from Elephantine, none of them literary. *Trois ostraca araméens d'Éléphantine*, in *Ann. du Service*, XXVI (1926), 23-31.

C. C. EDGAR has published two further tombstones from the Jewish cemetery at Tell el-Yahudiyyeh, one on a Jewess named Sabbath, the other on three children, two of whom died in year 23, the third in year 2. EDGAR takes these as 23 Tiberius + 1 Gaius and 2 Gaius, which gives another fixed point for dating, the previous identifiable dates being in the reign of Augustus. *Two more Tombstones from Tell el-Yahudiyyeh*, in *Ann. du Service*, XXVI, 102-4.

The double part VIII IX of the New Palaeographical Society's facsimiles (Series II) contains three papyri, two of them previously unpublished. These are: No. 136, two private letters, one dated A.D. 5-6 (P. Lond. Inv. 2553), the other A.D. 9 (P. Lond. Inv. 2552). Probably both are from the Fayyûm. The second is in a very interesting hand, with curious forms. No. 137, the sale of A.D. 365 (P. Lond. Inv. 2227) edited in the *Recueil Champollion* (see *Journal*, IX, 107).

The double part X XI, received as this goes to press, contains: No. 156, one of the Dura parchments, circa 195-190 B.C.; No. 157, P. Oxy. 1953, 2001, 1949, 1950.

H. HENNE has published two very interesting and historically important papyri from the collection bought in 1921 and 1922 in the Fayyûm and at Alexandria out of the Graux fund. The first, bought in the Fayyûm but of uncertain provenance, and dated 18 Apr., A.D. 45, is a letter addressed by Dionysodorus to C. Julius Iollas, strategus of the Heracleopolite nome, reporting the presence in his nome of some poll-tax-payers from Philadelphia—no doubt a case of ἀναχώρησις. The second is a draft of a petition to the prefect Tib. Claudius Balbillus (see below, § 4) from six poll-tax-collectors of villages in the Division of Themistes, who declare that owing to the depopulation of their villages, partly through flight and partly through death, they are in danger of having to *πολιτεῖν* τὴν *πρακτορείαν*. The two papyri show that the economic difficulties which ruined Egypt under the Romans had already begun in the 1st century. *Papyrus Graux* (Nos. 1 et 2). *La dépopulation de six villages du Fayyûm au 1er siècle après J.-C.*, in *Bull. Inst. Fr. d'Arch. Or.*, XXI (1923), 189-210.

THUNELL's *Sitologen-Papyri* is reviewed by G. D[E] S[ANCTIS] (*Riv. di Fil.*, N.S., III, 1925, 587-8).

M. NORSÄ has published a number of papyri in the Museum of Alexandria. They are edited with her usual skill and include several noteworthy texts. Among them are: 1, an interesting register of bank-diagraphai, A.D. 143-4 (the Psalter fragment on the verso would be indubitably the earliest MS. of the Greek Psalter yet discovered if Signorina NORSÄ's date, 2nd cent., could be upheld, but it seems improbable, and she informs me that she now dates it in the 3rd cent. It thus ranks along with P. Lond. Inv. 2556, which is of about the same period); 2, an imperfect register of contracts, A.D. 180-92; 7, an interesting petition; 10, a Heronius letter; 11-19, papyri from the 6th cent. Aphrodito archive; the Apollos in 17 is certainly the father of the poet. *Papiri del Museo Greco-romano di Alessandria*, in *Bull. Soc. Arch. d'Alex.*, No. 22, 157-88.

W. SCHUBART has edited from the Berlin collection a parallel text to P.S.I. 690, a document of oikogeneia. With it he publishes also a similar text from the British Museum (P. Lond. Inv. 2226) and republishes P.S.I. 690, adding a very interesting and valuable discussion of the whole question of oikogeneia. *Oikogeneia*, in *Raccolta Lumbroso*, 49-67. Reviewed by WILCKEN (*Archiv*, VIII, 96-7).

SCHUBART has also published an important papyrus (P. Berl. 13992) containing a copy of a *dossier* of papers relating to a dispute about the transfer of documents by retiring bibliophylakes. There is a duplicate of this *dossier* in the British Museum, which also possesses a much longer roll of papers relating to the same or a similar dispute, and SCHUBART is able to give a collation of the London with the Berlin document. He appends a brief discussion of the case. *Die Bibliophylakes und ihr Grammateus*, in *Archiv*, VIII, 14-24.

In his *Juristischer Papyrusbericht* (*Z. Sac.-St.*, XLVI, 1926, 314), P. M. MEYER publishes the text of P. Berl. 11053, which is a document of the same class as P.S.I. 777, a record of entry among the ephebi. Independently H. I. BELL has published, with a discussion of this species of document, which was evidently a well-established institution, a papyrus of the same kind from the Michigan collection. In a note at the end he refers to MEYER's text. *Records of Entry among the Ephebi*, in *Journal*, XII (1926), 245-7.

A. E. R. BOAK has published a complete and interesting papyrus from the Michigan collection (P. Mich. 645), dated in A.D. 25, in which four priests take oath to perform the office of ἀφροφύλακες at Tebtunis, two of them for each ἀφείσις. *An Oath of the ΑΦΕΣΟΦΥΛΑΚΕΣ at Tebtunis*, in *Raccolta Lumbroso*, 45-8. Reviewed by WILCKEN (*Archiv*, VIII, 92-3).

A noteworthy Latin papyrus, of interest both palaeographically and for its contents, has been published, with a facsimile, by H. A. SANDERS. This is P. Mich. 1320 (bought in 1923). It is a judgement in a dispute about an inheritance. Soldiers of the Ala Vocantiorum, Ala Apriana, and Ala Xoitana and a centurion of the Legio III Cyrenaica occur. *A Latin Document from Egypt*, in *Trans. Am. Phil. Ass.*, LV (1924), 21-34. The publication is reviewed by WILCKEN (*Archiv*, VIII, 93-4), and P. M. MEYER and E. LEVY have republished the text with revised readings (made from the facsimile) and a commentary. They consider that the parties were not Roman citizens; the law is Graeco-Alexandrian and the use of Latin was due merely to its employment in the routine business of the Roman army. *Sententia des iudex datus in einem Erbrechtsprozess unter Claudius*, in *Z. Sac.-St.*, XLVI (1926), 276-85. Another Latin document, also but more directly throwing light on military matters, has been edited by HUNT. This very valuable document, bought by him in Egypt, is nothing less than a fragment of a pridianum of an auxiliary cohort stationed in Moesia. HUNT thinks that the unit in question was the Cohors I Hispanorum veterana quingenaria equitata and that this was identical with the Cohors I Hispanorum equitata which was in Egypt during the latter part of the 1st century. It perhaps went to Lower Moesia in 99, may later have been sent back to Egypt at the time of the Jewish revolt, and returned to Moesia when it was over. It is hoped that a facsimile of this papyrus will appear in the next part of the New Palaeographical Society's series. *Register of a Cohort in Moesia*, in *Raccolta Lumbroso*, 265-72. Reviewed by WILCKEN (*Archiv*, VIII, 94-5). A third document connected with the army is a bilingual papyrus published by M. NORSÄ. This text, dated in A.D. 220, consists of a Greek receipt to the eutheniarch of Oxyrhynchus for bread and a Latin receipt to the same for wine, both at fixed prices, the bread at 1 ob. per loaf, the wine at 4 ob. per sextarius castrensis. The receipts were issued by the agrimensor prefecti Egypti = γεωμέτρης τοῦ ἡγεμόνος. The papyrus also contains curious accounts in Greek, unconnected with the receipts. *Un papiro greco-latino del Museo del Cairo: Ricevute per vettovagliamenti militari*, in *Raccolta Lumbroso*, 319-24. Reviewed by WILCKEN (*Archiv*, VIII, 99-100).

G. VITELLI has published a papyrus at Cairo, sent him by CAPOVILLA, which contains notes of letters concerning charges against an ex-strategus and others. It throws light on the technique of registers.

There were at least 11 rolls of μέτρωπα (cases proceeding), at least nine of ὁμολογία (cases settled), and at least eight of ἐξέτασις (cases reserved for ἐξέτασις). *Atti di istruttoria o carico di funzionarii dell' Egitto romano*, in *Raccolta Lumbroso*, 23-8. Reviewed by WILCKEN (*Archiv*, VIII, 97).

H. B. VAN HOESSEN and A. C. JOHNSON publish a fragment from the Princeton collection (AM 8938), which, despite its incompleteness, is of unusual interest, as it provides evidence for the *album decurionum* in Egypt, as also for the classification of public duties into βουλευτικαὶ λειτουργίαι and δημοτικαὶ ἐπιμεσίαι. The date is lost, but it cannot be before Severus's municipal organization of 202. The editors suggest that the document may be "a copy of the regulations devised for the assignment of the liturgies in the period of transition from the old to the new system." They give a restoration which, though conjectural, seems likely to be right in the main lines. The subject appears to be the liability to liturgies of men of senatorial fortune whose names have not yet been included in the *album*. A facsimile is given. *A Papyrus dealing with Liturgies*, in *Journal*, XII (1926), 116-9. An abstract of a paper on this papyrus had previously been published in *Proc. Am. Phil. Ass.*, LV (1924), xxxiii.

A. E. R. BOAK publishes, from the long roll P. Mich. 622, previously described by him, abstracts of five alimentary contracts with a discussion of this type of document, dealing in particular with their relation to Demotic contracts (he refers to an unpublished Demotic contract, P. Mich. 624). The new evidence tends to confirm JUNKER's view. *Alimentary Contracts from Tabnais*, in *Journal*, XII (1926), 100-9.

P. M. MEYER has published, from the Berlin collection (P. Berl. 13993), a συγχώρησις of A.D. 120-1 addressed to the Archidicastes and concerning a dispute as to the paternity of a child. He provides the text with a commentary of the masterly kind which he has taught us to expect from him. *Gerichtsnote-rielle alexandrinische Vergleichsurkunde über Ansprüche aus "loser Ehe" zwischen Griechen*, in *Raccolta Lumbroso*, 223-8. Reviewed by WILCKEN (*Archiv*, VIII, 95-6).

H. HENNE publishes two Cairo papyri, *viz.* I, an offer to lease an olive-yard, a duplicate of P.S.I. 33, which it helps to restore; II, an extract, headed ἐκ λαογραφίας κατ' ἄνδρα, from a list of λαοί. He thinks that the 9th year mentioned is that of Nero, and that the phrase λαογραφία κατ' ἄνδρα persisted till then. *Deux papyrus grecs du Musée du Caire*, in *Aegyptus*, VI, 330-4.

H. B. VAN HOESSEN and A. C. JOHNSON publish, from the Garrett Collection, deposited in the Princeton University Library, a rather interesting lease of crown land, dated in A.D. 254. It has been made up from 11 fragments and is still not quite complete. There are three lessees, and the contract contains some unusual provisions. The land was at Tanis. The text offers various problems and seems to require correction in several places. The editors add a translation and an elaborate commentary. *A Lease of Crown Land on Papyrus*, in *Proc. Am. Phil. Ass.*, LVI (1925), 213-28.

In the same number of these *Proceedings* (p. xli), is given an abstract of a paper by S. H. WEBER on two of the Princeton papyri, P. Princeton AM 8909, a petition like P. Ryl. 124-52, by a δημόσιος γεωργός to the ἐπιστάτης φυλακιστῶν of A.D. 13 (the text is given), and AM 8928, a letter from Theano to her brother (text given but no date assigned). *Two Papyri from the Princeton Collection*.

WILCKEN reviews WESTERMANN's *Custinet Dancers* and BELI's appendix to it (see *Journal*, XI, 94) in *Archiv*, VIII, 97-8.

G. ZERETELI publishes a rather interesting letter of the late 2nd century in which the writer urges his brother with great insistence to buy up and put on the market all the peaches he can obtain. A translation and commentary are given; the editor points out that peaches became known to the Graeco-Roman world comparatively late, and that the trade in them must have been profitable. *Brief des Ammonios an Apion über Pfirsiche*, in *Aegyptus*, VII (1926), 277-81.

I come now to the Byzantine period. P. Oxy. XVI has been reviewed by W. SCHUBART (*Gnomon*, II, 1926, 174-82; important; some good suggestions), K. FR. W. SCHMIDT (*G.G.A.*, CLXXXVII, 1925, 8-32; many suggestions, both for reading and interpretation), V. ARANGIO-RUIZ (*Riv. di fil.*, N.S., IV, 1926, 91-9; important), and R. HELBIG (*Phil. Woch.*, XLV, 1925, 921-3). GHEDINI's *Lettere cristiane* has been reviewed by FR. BILABEL (*Phil. Woch.*, XLVI, 1926, 492-4), P. COLLART (*Rev. ét. gr.*, XXXVII, 1924, 248-9), and N. HOHLWEIN (*Bull. bibl. et péd. du Musée Belge*, XXIX, 1925, 18-19).

I may refer here to the publication of S. EITREM's masterly P. Oslo. I, which is noticed in detail in § 2 above.

A. CALDERINI publishes, with an elaborate commentary, a contract of A.D. 303 relating to tow, and collects all the papyrus references to this material. *Contratto di somministrazione di stoppa in un papiro inedito della raccolta Castelli*, in *Raccolta Lumbroso*, 77-92. Reviewed by WILCKEN (*Archiv*, VIII, 100-1).

To illustrate the word ἀφελισμός W. L. WESTERMANN has published a 4th cent. Columbia papyrus from Karanis containing a certificate of work on the dykes in which this word, which he discusses at length, occurs. *Dike Corcé in Roman Egypt: On the Meaning of ΑΦΥΛΙΣΜΟΣ*, in *Aegyptus*, VI (1925), 121-9. Reviewed by WILCKEN (*Archiv*, VIII, 102-3).

H. I. BELL publishes a petition of the 5th cent. (P. Lond. Inv. 2217, addressed to Theodore, Bishop of Oxyrhynchus, which illustrates the *episcopalis audientia*. *The episcopalis audientia in Byzantine Egypt*, in *Byzantion*, I (1924), 139-44. Reviewed by WILCKEN (*Archiv*, VIII, 101-2).

G. F. ZEREFELI publishes from a wooden tablet at the Hermitage a palimpsest document, apparently of the 5th cent., which seems to have been written as an exercise in the use of the chancery hand. He quotes a parallel from a papyrus in his collection. *Greek Wooden Tablet of the Fifth Century from the Hermitage* in Russian, in *Bull. Inst. Conc. d'Hist. et d'Arch.*, III (1925), 17-30. P. JERNSTEDT has published a private letter of the 6th cent., interesting both linguistically and for its contents, from a certain Scholasticus to his mother. *Middle Greek Papyri: I. Letter of Scholasticus to his Mother Philostorgia* (in Russian), in *Journal des russ. Ministorians f. Volksankl.*, 1917, 287-98. [For a synopsis of these two publications I am indebted to Mr. MILNE, as I do not read Russian. The second was mentioned in my last bibliography, but I had not then seen it.]

H. I. BELL and W. E. CRUM have published, from P. Lond. 1821, an interesting Greek-Coptic glossary by the well-known Dioscorus of Aphrodito. They add an introduction, a translation of the Coptic, a detailed commentary, and a word-index. *A Greek-Coptic Glossary*, in *Aegyptus*, VI (1925), 177-226. An elaborate review by W. CRONERT *Gnomon*, II, 1926, 654-66, deals generally with the literary equipment of Dioscorus and his period. See also below, § 9.

G. RUTILLARD republishes two inscriptions on one stele, from Ombos included in HALL'S *Coptic and Greek Texts* (Plates 1 and 2), giving a photographic facsimile of the verso and discussing them in detail. The text on the recto records the cleaning and rebuilding of a δημόσιος τόπος for the reception of travellers, that on the verso the building of an ἀπαντήριον (qu. the same) εἰς οἴκησιν τῶν ἐισερχομένων) σπρ(αριστῶν). *Notes sur deux inscriptions d'Ombos*, in *Mélanges offerts à M. Gustave Schlumberger*, 1924, 85-100.

A reference must be given to the magnificent publication by H. E. WINLOCK, W. E. CRUM and H. G. EVELYN WHITE of their long-expected work on the monastery of Epiphanius at Thebes, excavated for the New York Metropolitan Museum. Part I is a general description of the monastery and the finds there made; in Part II are published the ostraca and papyri, which are of considerable historical importance. The Greek texts are naturally much fewer in number than the Coptic, and most of them fall under §§ 1 and 5 of this bibliography, but there are a few documents (623-34). 623 is an inventory of church property, 624 an interesting letter illustrating the unsettled state of Egypt at the period (6th-7th cent.), 630 a list of names, several of them Teutonic. *The Monastery of Epiphanius at Thebes*. (*The Metropolitan Museum of Art Egyptian Exhibition*. Part I, *The Archaeological Material* by H. E. WINLOCK, *The Literary Material* by W. E. CRUM. Part II, *Coptic Ostraca and Papyri* by W. E. CRUM, *Greek Ostraca and Papyri* by H. G. EVELYN WHITE. New York, 1926. Part I, pp. xxvi+276. 35 Plates. Part II, pp. xvi+375. 17 Plates. Indexes in each volume.

I know only from a summary by E. BICKERMANN (*Phil. Week.*, XLV, 1925, 887-8) an article by P. V. JERNSTEDT in Russian, in which he publishes with a Coptic and Russian translation a Greek letter (quoted by B.) of the period of the Persian Conquest under Heraclius in his own collection. It is extremely interesting alike linguistically, for its bad Greek, historically, as it describes the writer's ill-treatment by the Persians, and geographically, since it proves that the name φοσσᾶρον (Fustât), which is here used, must go back to Roman times and refer, not as hitherto supposed, to 'Amr's camp, but to the cantonments of the Roman garrison. *Denkmäler der griechischen Sprache Agyptens*, in *Bull. Acad. Sc. de Russie*, 1921, 677-724. [Addition in proof: this text is now accessible in P. ROSS-GEORG. IV (see below), where it is reprinted.]

W. HENGSTLBERG has published an interesting review of CRUM and BELL'S *Wadi Sarga* (*Byz. Z.*, XXV, 1925, 158-9).

An important event for students of the Arab period and the Graeco-Arabic protocol is the publication by A. GROHMANN of Vol. I of his edition of the Rainer Arabic papyri. This consists, first of a general introduction to these papyri, second of an edition, with elaborate introduction and commentaries and admirable facsimiles, of the protocols, with which GROHMANN publishes also the Graeco-Arabic protocols of other collections. The volume is superbly produced and the editor's work shows wide erudition, tireless

patience, and great mastery of the material. *Corpus Papyrorum Raineri Archiducis Austriae*, Tomus I, Pars 1-3. Vindobonae, Burgverlag, F. Zöllner, 1923, 1924. Teil 1, *Allgemeine Einführung in die arabische Papyri*, pp. ix+108. 5 Illustrations in the text. Teil 2, *Protokolle*, pp. cii+311. 1 Table and 4 illustrations in the text. Teil 3, Plates (36). Reviewed by WILCKEN *Archiv*, VIII, 103-4.

A Coptic papyrus (Brit. Mus. Or. 8903), published by W. E. CRUM calls for mention here because of its historical interest. It is an acknowledgement by representatives of the trade guilds of Apollonopolis Magna of the receipt of pepper, which they undertake to distribute and not to unload on to the poor. The Governor was 'Abdallah, the indiction the 8th, but the date cannot be precisely fixed. A translation is given. The document well illustrates the working of the pepper monopoly under the Arabs. *Koptische Zunft und das Pfeffermonopol*, in *Zeitschr. f. äg. Spr.*, LX (1925), 103-11.

H. I. BELL publishes two official letters of the Arab period. The first is a very finely preserved papyrus belonging to the Metropolitan Museum of Art, New York, which contains a letter from Atlas, no doubt the Duke of the Thebaid, to a Theban monastery respecting a failure to pay poll-tax during a recent revolt. It is in the nature of a firman of protection and may date from A.D. 712. The editor discusses the historical and administrative problems which it raises. A much reduced facsimile is given. The other letter is P. Lond. 1393, which was published in Vol. IV of the London Catalogue but in an imperfect form, having lost the right half. Most of the missing portion has recently been acquired, and the whole text is now republished with introduction and commentary. *Two Official Letters of the Arab Period*, in *Journal*, XII (1926), 265-81.

As this goes to press I have received Part IV of P. Ross-Georg., edited by P. JERNSTEDT. It contains the Aphrodito papyri from the Kurrah archive belonging to the Lichačov collection and is particularly valuable because several of these are the missing halves of fragments in P. Lond. IV. No. 6 in particular (joining P. Lond. 1391) is a document of really great historical importance. The editorial work is of the first quality. The papyrus referred to above is republished in an appendix. *Papyri Russischer und Georgischer Sammlungen*, IV. *Die Kome-Aphrodito-Papyri der Sammlung Lichačov*. Tiflis, Universitäts-lithographie, 1927. Pp. viii+130. 3 Plates.

4. POLITICAL HISTORY, BIOGRAPHY, ADMINISTRATION, TOPOGRAPHY, CHRONOLOGY.

General. I know only from a prospectus a history of Egypt from prehistoric times to the present day by F. SCHUBART. *Von der Flugselsonne zum Halbmond*. Leipzig, Hinrichs, 1926. 65 Illustrations (40 Plates) and 2 maps. Mk. 12.

A brief reference should perhaps be made to an article by P. CLOCHÉ, *Les rapports des Grecs avec l'Égypte de la conquête de Cambyse, 525, à celle d'Alexandre, 331* (*Rev. ét. anc.*, XXVII, 1925, 230-8), which is a critical examination of Mallet's work under this title.

W. SCHUR sketches in an interesting article the history of Egypt from 404 B.C. to the reconquest by Persia, dealing also with the economic and aesthetic sides of the national life. He differs from ERMAN in his estimate of the power of Egypt, which he rates much higher. The chief cause of the collapse of the revived empire he holds to be the failure of the Egyptian kings to incorporate organically into the structure of the state the Greek mercenary army. They did however prepare the way for the Hellenization of Egypt. *Zur Vorgeschichte des Ptolemäerreiches*, in *Klio*, XX (1926), 270-302.

SCHUBART's *Ägypten* has been reviewed, along with his *Jahrtausend*, by W. OTTO (*Phil. Woch.*, XLV, 1925, 328-31; laudatory but regrets failure to present "die grossen Entwicklungslinien und -tendenzen"; points out some historical blunders).

P. SHOREY reviews the joint volume *The Hellenistic Age*—see *Journal*, XI, 97—in *Class. Phil.*, XX, 1925, 350-1.

A very important volume, received just in time for mention here, has been published by P. JOUGUET. It is a volume in H. BERR's series *L'évolution de l'humanité* and deals with the effects of the Macedonian conquest of the Persian Empire and the Hellenization of the East. Though I have not yet had time to study it in detail, it is clear that JOUGUET has here rendered a great service to historical science. The volume, to which H. BERR contributes a preface, contains a bibliography, a table of dynasties, and an index. *L'Impérialisme macédonien et Hellenisation de l'Orient*. Paris, La Renaissance du Livre. Pp. xiv+495, 7 Plates, 4 maps.

Reference must be made here to the appearance of Vol. IV, Part I of the second edition of K. J. BELOCH's *Griechische Geschichte*, under the sub-title *Die griechische Weltherrschaft* (Berlin and Leipzig, Walter de Gruyter, 1925. Pp. xiii+734).

W. OTTO, in an article dealing with SIDNEY SMITH's volume of Babylonian historical texts, brings out the historical importance of the new matter. He discusses the date of the murder of Alexander II and the beginning of Seleucus's regnal years. The new material allows, he considers, an *argumentum ex silentio* not permissible in the case of Diodorus. *Die Bedeutung der von Sidney Smith, Babylonian historical texts veröffentlichten Diadochenchronik*, in *Stzber. Bay. Ak. Wiss.*, 1925, 7 Nov.

J. G. MILNE has brought out a third edition of his history of Roman Egypt, fully revised and largely rewritten to incorporate the new material. The old edition of this invaluable work, though still indispensable to students, was out of date, and the new edition, which shows the same combination of thoroughness and compression as the old, is most welcome. *A History of Egypt under Roman Rule*. (Vol. v of *A History of Egypt*.) London, Methuen, 1924. Pp. xxiii+331. Many illustrations. Reviewed by H. I. BELL (*Journal*, xii, 1926, 317-8).

J. VOGT has contributed to the series *Beihefte zum "Alten Orient"*, edited by SCHUBART, a very interesting account of the development of Roman policy as illustrated by the coins of Alexandria, which reflect all the various tendencies. *Römische Politik in Ägypten*. (*Beihefte*, Heft 2.) Leipzig, Hinrichs, 1924. Pp. 39. 4 Plates. Reviewed by E. HOHL (*Gnomon*, i, 1925, 346; unfavourable; the volume fails to do justice to "der populäre Zweck" of the series) and W. KUNKEL (*Phil. Woch.*, xlv, 1925, 996-7). VOGT's *Die alexandrinischen Münzen: Grundlegung einer alexandrinischen Kaiserergeschichte* (I Bd.: Text. II Bd.: Münzverzeichnis. Stuttgart, Kohlhammer. Pp. x+234. 5 plates+iv+185 pp. Mk. 32) is reviewed by SCHUBART (*Phil. Woch.*, xlv, 1925, 16-17; favourable), A. BARÉ (*Nomism. Z.*, N.F., xvii, 1924, 109-14; unfavourable), E. BRECCIA (*Bull. Soc. Arch. d'Aler.*, No. 21, 1925, 131-4), and H. M[ATTINGLY] (*Nomism. Chron.*, 5th S., iv, 1924, 117-20).

L. WENGER, in a speech on his inauguration as rector of Munich University, 29 Nov. 1924, sketches the principles of Roman administration and the importance of the executive. In form the constitution was a democracy, but the power of the magistracy prevented the more extreme forms of democracy, preserving the aristocratic element. He speaks in conclusion of Rome's failure to solve the social problem. There are some references to the evidence of papyri. *Von der Staatskunst der Römer. Münchener Universitätsreden*, Heft 1, München, Max Hueber, 1925. Pp. 40.

MARTIN's paper *La fiscalité romaine*, referred to below in § 5, is a brilliant sketch of Roman financial policy, emphasizing the pitilessness of the exploitation to which Egypt was subjected.

B. A. VAN GROENINGEN discusses the relation of Egypt to the Roman Empire, concluding that it was definitely annexed to the dominions of the *populus Romanus* and was not a personal possession of the *princeps*. The difference between it and the other provinces, in the fact that it was governed only by men of equestrian rank, was one of administrative practice, not of principle. *L'Égypte et l'Empire*, in *Aegyptus*, vii (1926), 189-202.

M. GELZER, in an interesting paper, originally a lecture at a meeting of classical scholars at Weimar, protests against the tendency to treat the Byzantine period even before Justinian as a mere appendix to ancient history or even to separate it from ancient history altogether. He emphasizes the fact that, despite the sweeping changes of Diocletian, there was at that time no sense of any radical break with tradition; Diocletian was but completing and rendering explicit tendencies present from the beginning of the principate. *Altertumswissenschaft und Spätantike*, in *Hist. Z.*, cxxxv, 173-87.

Political history and position of nationalities. V. EHRENBERG contributes to the series *Beihefte zum "Alten Orient"* (Heft 7) a study of Alexander's policy with regard to Egypt. *Alexander und Ägypten*. Leipzig, Hinrichs, 1926. Pp. 59. Mk. 2. Reviewed by J. G. M[ILNE] (*J.H.S.*, xlv, 1926, 282-3; favourable but thinks EHRENBERG over-emphasizes "spiritual rather than material explanations of facts") and F. JACOBY (*Gnomon*, ii, 1926, 659-63; favourable).

D. COHEN collects the evidence of ancient authorities for Alexander's visit to the oracle of Ammon, concluding that Callistates, the oldest, invented the story that Alexander was *unexpectedly* hailed as the son of the god, and that the legend grew and developed out of this. *Annotaciones ad auctores et papyros nonnullas*. III. *De Alexandro Magno Ammonis Oraculum Consultante*, in *Mnemosyne*, liv (1926), 83-6.

E. KORNEMANN has published a study of the policy of Ptolemy I with relation to Alexander's "Verschmelzungspolitik," i.e. his attempt at a fusion of Greek and Oriental elements. Ptolemy, he concludes, at first, while satrap, followed this course, but abandoned it when Seleucus did, reverting to a "Herrenstellung" *vis-à-vis* of the natives, lest he should be left behind by Seleucus. *Die Satrapenpolitik des ersten Lagiden*, in *Raccolta Lombroso*, 235-45.

W. W. TARN publishes an article on *The First Syrian War*, *J.H.S.*, xlv (1926), 155-62.

A monograph by A. PRIDIK entitled *Der Mitregent des Königs Ptolemaios II. Philadelphos* (Dorpat, C. Mattiesen, 1924. Pp. 43), in which he maintains that "Ptolemy the son" (commandant of Miletus and Ephesus) was the son of Lysimachus king of Thrace and Arsinoë II and that the co-regent with Ptolemy II was the later Ptolemy III, is known to me only from reviews by E. KIESSLING (*D. Lit.-Z.*, 1926, 2055) and H. BERVE (*Phil. Woch.*, XLV, 1925, 834-7).

W. STRUVE, in an article on the so-called "Topferorakel," concludes that the text is a translation from the Egyptian, *κεραμείς* being a rendering of *kd* or *nhp*, which = Töpfer and were epithets of Chnum. Perhaps the prophet was the sacred ram. The text dates from the time of Ptolemy III and was the work of an Egyptian priest, who sought in this way to reconcile his countrymen to Greek rule. *Zum Topferorakel*, in *Raccolta Lumbroso*, 273-81.

W. SPIEGELBERG publishes a monograph on the new trilingual decree in honour of Ptolemy IV (see *Journal*, XI, 97, where the reference, *Un nouveau décret trilingue ptolémaïque*, in *C.-R. Ac. Inscr.*, 1923, 376-83, was accidentally omitted), which has now been published separately by GAUTHIER and SOTTAS (Cairo, 1925; not accessible to me). He gives a new rendering and valuable notes. *Beiträge zur Erklärung des neuen dreisprachigen Priesterdekretes zu Ehren des Ptolemaios Philopator*, in *Stzgsber. Bay. Ak. Wiss.*, 1925, 4. Abh. Pp. 30. At the moment of going to press I have received from him a further study, *Eine neue Urkunde zu der Siegesfeier des Ptolemaios IV und die Frage der ägyptischen Priestersynoden*, von W. SPIEGELBERG und W. OTTO (*Stzgsber. Bay. Ak. Wiss.*, 1926, 2. Abh. Pp. 40. 1 Plate), in which he publishes a Demotic papyrus found in 1906-1907 at Elephantine in the excavations of the Berlin Museum, relating to the departure of a priest to the festival in honour of Philopator's victory. It appears from this that the festival was at Alexandria. SPIEGELBERG also publishes two Demotic ostraca at Strassburg, and OTTO adds an article on the priestly synods of Ptolemaic times.

WILCKEN, in an article on the alleged *coup d'état* of Octavian, in which he uses the evidence of *Chrest.* 462, decides that there was no *coup d'état* and no contradiction between the Monumentum Ancyranum and Augustus's autobiography. The triumvirate legally expired not in 33 but in 32. When in 32 Antony was deposed Octavian considered his triumvirate at an end but accepted a "Notstandskommando" (unlimited in time) and combined with it the triumphal power. *Der angebliche Staatsstreich Octavians im Jahre 32 v. Chr.*, in *Stzgsber. Preuss. Ak. Wiss.*, 1925, x, 66-87.

F. HEICHELHEIM has published a useful book on the foreign element in the Ptolemaic dominions. He discusses with great acuteness such problems as the nature of the Epigone, the *Πέριαι τῆς ἐπιγονῆς*, and the meaning of the term *ἀγώγιμος* as applied to them, analyses the statistics of foreigners in Egypt, and gives a valuable prosopography. *Die auswärtige Bevölkerung im Ptolemaerreich*. (*Klio*, XVIII. Beiheft, N.F. v. Beiheft.) Leipzig, Dieterich, 1925. Pp. vi+109. Reviewed by A. WIEDEMANN (*Theol. Lit.-Z.*, LI, 1926, 77-8), F. R. GEYER (*Hist. Z.*, CXXXIII, 1925, 345-6), W. OTTO (*Or. Lit.-Z.*, 1926, 633-5), E. BICKERMANN (*Gnomon*, II, 1926, 608-12; important), and (in this number of the *Journal*) H. I. BELL.

At the moment of going to press I have received from W. SCHUBART what is clearly a valuable monograph on the Greeks in Egypt. It is Heft 10 of the *Beihefte zum "Alten Orient"* and bears the title *Die Griechen in Ägypten*. Leipzig, Hinrichs, 1927. Pp. 54. 2 Plates. B. A. VAN GRONINGEN in his inaugural lecture as Privat-Docent in Greek papyrology at Groningen, 13 Oct. 1925, treats the same subject, giving an interesting sketch of Hellenism in Egypt, in which he shows how impossible it really was for Hellenism to penetrate the Egyptian populace. Neither Islam nor Christianity was the true slayer of Hellenism, but rather the Egyptian himself. Islam could conquer Egypt because it was of the Orient, but Hellenism belonged to the Occident. *Hellenisme op Vreemden Bodem*. Groningen, P. Noordhoff, 1925. Pp. 21. Reviewed by H. B[OLKESTEIN] (*Tijdschr. v. Gesch.*, XLI, 1926, 84). W. L. WESTERMANN deals with one aspect of the same theme in an interesting and readable account of the activities of the Greeks under the early Ptolemies, with special but not exclusive reference to the Zeno papyri. *The Greek Exploitation of Egypt*, in *Pol. Science Quarterly*, XL (1925), 517-39. Reference may also be made to a review by W. OTTO (*Phil. Woch.*, XLVI, 1926, 39-46) of J. JUTHNER's *Hellenen und Barbaren* (Leipzig, 1923), which, though not papyrological, is useful to papyrologists inasmuch as it deals with the use of the term Hellene as "Greek by culture."

For the Persians of the Epigone see TAIT's review of VON WOESS's *Asylwesen*, referred to below, § 6.

FUCHS's *Die Juden Ägyptens* (see *Journal*, XI, 99), of which a synopsis is given by PREMERSTEIN in the *Jahrb. Phil. Fak. in Marburg*, 1923, 209-11, is reviewed by SCHUBART (*Or. Lit.-Z.*, XXVIII, 1925, 376-8: laudatory) and F. PERLES (*Rev. ét. juives*, LXXIX, 1924, 220-1); PETRIE's *Jews in Egypt* by M. LÖHR (*Or. Lit.-Z.*, XXVIII, 1925, 78). H. I. BELL has contributed to the *Beihefte zum "Alten Orient"* (Heft 9) a

monograph entitled *Juden und Griechen im römischen Alexandria* (Leipzig, Hinrichs, 1926. Pp. 52. 2 Plates, 1 illustration in the text), in which he sketches historically the relations between the Jewish community of Alexandria and the Greeks. Though primarily concerned with the Roman period, the volume deals also with the fortunes of the Alexandrian Jews in Ptolemaic and Byzantine times, and discusses the organization and legal position of the community. There is a select bibliography¹. Reviewed by A. NEPPI MODONA (*Gli Ebrei in Alessandria*, in *Bilychnis*, XXVIII, 1926, 322-3) and A. CALDERINI (*Aegyptus*, VII, 1926, 336-7). M. ENGERS, in an article on the relations between Alexandria and the Julio-Claudian Caesars, deals specially with the Imperial policy towards the Jews, the root idea of which was, he holds, to widen or at least perpetuate the gulf between them and the Greeks, on the principle *Divide et impera*. *Alexandrie en de Keizers uit het Julisch-Claudische huis*, in *Tijdschr. v. Gesch.*, XLI (1926), 113-36. For the position of the Jews see also the article of ENGERS mentioned under *Administration* below.

As mentioned in § 3 above, many of the items to be recorded in connexion with the volume *Jews and Christians* fall properly in the present section. The following refer particularly to the letter of Claudius: The theory of S. REINACH, that there is a reference in the section on the Jews to Christian propaganda, mentioned in my last bibliography, was developed in a paper read to the Société Ernest Renan, 27 Dec. 1924, and published under the title *La première allusion au christianisme dans l'histoire; sur un passage énigmatique d'une lettre de Claude*, in *Rev. Hist. Rel.*, xc, 1924, 108-22. In this paper REINACH doubtfully identifies the Babylon of I Peter v. 13 with the Egyptian Babylon. FR. CUMONT brought some reinforcement to REINACH's view by citing the parallel phrase in Acts xxiv. 5, and suggested that the writer of the letter knew of the accusation brought by Jewish conservatives against innovators of being "a plague to the whole world." Christianity may have spread to Alexandria already; hence Claudius forbids the introduction of Jews from outside. *La lettre de Claude aux Alexandrins et les Actes des Apôtres*, in *Rev. Hist. Rel.*, xci (1925), 3-6. In a later note REINACH calls attention to the fact that DE SANCTIS had anticipated his idea [see the review in *Riv. Fil. Class.* mentioned in *Journal*, xi, 95]. He refers to a note by BATIFFOL in *La Vie Catholique* (3 Jan. 1925). *Encore la lettre de Claude*, in *Rev. Archéol.*, v S., xxii (1925), 171-2. In a still later note he calls attention to CUMONT's article. *Encore la lettre de Claude*, *ibid.*, 317. DE SANCTIS also calls attention to CUMONT's article, accepting his view, in *Riv. di Fil.*, N.S., iv (1926), 128. In an earlier note in the same periodical (N.S., III, 1925, 245-6, *I Giudei e le fazioni dei ludi*) he had noticed the emendation ἐπ(ε)ισπαίειν for ἐπισπαίειν (which I accepted, *Journal*, xi, 95²), saying that it does not alter his view of the sense, which he fortifies by a reference to Malalas. The view of DE SANCTIS is favoured by L. TONDELLI (*Scuola Cattolica*, LIII, 1925, 20), and P. P[EEETERS!] (*Rev. d'hist. eccl.*, 1925, 703). P. SCHMIEDEL, on the other hand, decisively rejects the Reinach-De Sanctis theory (*Neue Zürcher Zeitung*, 4 Apr. 1925, morning, *Kaiser Claudius über das Christentum im Jahre 41?*). TH. REINACH, in a valuable discussion of the letter entitled *L'empereur Claude et les Juifs d'après un nouveau document*, in *Rev. ét. juives*, LXXIX (1924), 113-44, rejects S. REINACH's view, and accepts WILCKEN's date for the *Acta Isidori*. He accepts the genuineness of Claudius's letter in Josephus in the main, but rejects the clause about the ἰση πολιτεία as an interpolation. He is decidedly against the Jewish citizenship. The following articles deal with the Claudius letter more generally: M. ENGERS, *Der Brief des Kaisers Claudius an die Alexandriner* (*Pap. Lond. 1912*), in *Klio*, xx (1925), 168-78 (holds that Alexandria had a senate, abolished by Augustus, and that Claudius's attitude changed between the writing of the letter in Josephus, which is genuine, and the writing of the London letter. He was weak and wanting in independence. In an appendix ENGERS rejects LAQUEUR's theory as to the section relating to the Jews [see above, § 3]); H. WILLRICH, *Zum Brief des Kaisers Claudius an die Alexandriner*, in *Hermes*, LX (1925), 482-9 (1. *Die jüdischen Gesandtschaften*, thinks the Jews sent two embassies, representing two opposing parties. [This removes the difficulty of the passage, and seems to me correct; see OTTO's review mentioned in § 3.] 2. *Die Gesandtschaft der Alexandriner*. There were 12 ambassadors, Tib. Claudius Archibius being mentioned in l. 19, where Ἀρχιβίος is to be supplied before Ἀπολλώνιος. [This had already been suggested to me privately by KRÜGER and is certainly right.]); A. CAMERON, *The Letter of Claudius to the Alexandrines*, in *Class. Quart.*, xx (1926), 45 (notes on several points, quoting some interesting parallels from other utterances of Claudius. One passage supports the genuineness of the letter in Josephus. Claudius "evidently supervised the drafting of his letters and edicts." Thinks the letter "passed through a Latin stage"); A. D'ALÈS, *Les Juifs d'Alexandrie et l'Empereur Claude d'après une découverte récente*, in *Études* (Paris), CLXXXII (1925), 693-701 (an interesting account of the letter but adding nothing fresh); A. NEPPI

¹ On p. 16, last line but one, "Avidius" is a misprint for "Avillius."

MODONA, *A proposito del P. Lond. 1912 73-104*, in *Aegyptus*, VII (1926), 41-8 (on LAQUEUR's theories, which he decisively rejects; takes note also of WILLRICH's article); H. STUART JONES, *Claudius and the Jewish Question at Alexandria*, in *J.R.S.*, XVI (1926), 17-35 (an interesting examination of the letter with special reference to the Jews, with many acute observations). Finally, M. ROSTOVITZ publishes an article on the statue of the Pax Augusta Claudiana which Claudius, after first refusing as *φορτικώτερος*, ordered to be set up at Rome, making the interesting suggestion that the Pax Augusta was here represented with the attributes of Nemesis as a side-blow at the Jews, and that this was why Claudius accepted it only for Rome, where its offensive suggestion would be less obvious. In a plate he illustrates some coins and an Alexandrian statuette of Nemesis, which give some support to his theory. In an appendix he discusses the identity of the Barbillus mentioned in the letter, whom he identifies, no doubt rightly, with the prefect Balbillus [see also below, under *Biography*], and also of two others of the ambassadors. *Pax Augusta Claudiana*, in *Journal*, XII (1926), 24-9.

M. P. CHARLESWORTH, referring *inter alia* to P. Lond. 1912, discusses Claudius's attitude towards the cult of the living Emperor, to which he thinks there was a marked tendency during his reign. He attributes it not so much to "the deliberate policy of Claudius" as to "the act of his counsellors." Claudius was "very susceptible to the influence of stronger wills." *Deus Noster Caesar*, in *Class. Rev.*, XXXIX (1925), 113-15.

A. NEPPI MODONA, in a well-documented and elaborate article, discusses the whole question of the so-called "pagan Acts of the Martyrs" or Alexandrian patriotic literature, coming to a conclusion very similar to that of VON PREMERSTEIN. *Protocolli giudiziari o romanzo storico? (I così detti "atti dei martiri pagani o alessandrini")*, in *Raccolta Lombroso*, 407-38. Reviewed by G. AMMON (*Phil. Woch.*, XLVI, 1926, 561-3). PREMERSTEIN's work is reviewed by P. P[ETERS] (*Anal. Boll.*, XLIII, 1925, 143).

I must refer here to K. STADE's *Der Politiker Diokletian* dealt with in § 2 above.

K. HOLL has published a very valuable discussion of the Meletian documents included in *Jews and Christians in Egypt*, making many good suggestions. He holds, probably with truth, that Heraiscus was a Meletian Bishop of Alexandria. He rejects the Athanasian authorship of the last letter. He stresses the importance for the history of monasticism of these documents, which help to fix the date of Pachomius's rule, which apparently the Meletians followed, for it is unlikely that he followed theirs. *Die Bedeutung der neuveröffentlichten meletianischen Urkunden für die Kirchengeschichte*, in *Stzgsber. Preuss. Ak.*, 1925, III, 18-31.

N. H. BAYNES has published a masterly sketch of the relations between Alexandria and Constantinople in ecclesiastical politics, which was originally given as a lecture for the Egypt Exploration Society. *Alexandria and Constantinople: A Study in Ecclesiastical Diplomacy*, in *Journal*, XII (1926), 145-56.

Administration. P. COLLOMP has published what seems to be an important volume on the chancery and diplomacy of the Lagids. I have unfortunately been unable to see this work. *Recherches sur la chancellerie et la diplomatie des Lagides (Publications de la faculté des lettres de l'Université de Strasbourg, fasc. 29)*. Paris, Les Belles Lettres, 1926. Pp. viii + 245. Referred to in *Archiv*, VIII, 103. Reviewed by A. CALDERINI (*Aegyptus*, VII, 1926, 333-4) and E. BICKERMANN (*Phil. Woch.*, XLVI, 1926, 1241-6; important).

WILCKEN has published a study of P. Edgar 67, 68 (= P. Zenon 59036, 59037), in which he discusses the question of the trierarchy in the Ptolemaic Empire. He differs from EDGAR in thinking that Xanthippus was a man of Halicarnassus; it was a Halicarnassian trierarchy. (EDGAR in his re-edition of the papyri is rather inclined to accept this view.) Halicarnassus was required in fact to provide a ship or ships for the Ptolemaic fleet. If, then, we place the Battle of Cos in 261 or 260, as now seems probable, its effects cannot have been so disastrous to the Ptolemaic Empire as generally supposed. *Zur Trierarchie im Lagidenreich*, in *Raccolta Lombroso*, 93-9.

D. COHEN, by a happy collocation of two passages of Diodorus and Arrian, explains οἱ ἔξω τάξεων as ἀπόμαχοι, i.e. "milites qui aut vulnerati aut invalidi pugnas non obibant, sed levia munia exsequebantur." *Annotaciones ad Auctores et papyros nonnullas*. II. οἱ ἔξω τάξεων, in *Mnemosyne*, LIV (1926), 82-3.

M. ENGERS studies the term πολιτεύμα, concluding that "πολιτεύματα liberae sunt civitates, sive Graecorum sive aliarum gentium, in territorio cuiusdam urbis cum aliis incolis collocatae." Alexander in fact, when founding Alexandria, made two civitates (perhaps more, since the Phrygians appear to have had a πολιτεύμα), each with its own laws and autonomy. Hence the Jews were really Ἀλεξανδρεῖς, though not πολῖται of the Greek πόλις. ΠΟΛΙΤΕΥΜΑ, in *Mnemosyne*, N.S., LIV (1926), 154-61.

An important inscription, which, according to WILAMOWITZ-MOELLENDORFF, contains a διάγραμμα of Ptolemy II or III regulating the constitution of Cyrene, has been published by S. Ferri. *Alcune iscrizioni di Cirene*, in *Abhandlungen d. Akad. d. Wiss. zu Berlin*, 1925 (publ. 1926), no. 5, 3 ff.

Letter lxvii from LUMBROSO to BRECCIA discusses the office of *ἐδέαρπος* (*Bull. Soc. Arch. d'Alex.*, No. 21, 34).

B. A. VAN GRONINGEN has published a thorough and conscientious study of the gymnasiarch in the Egyptian metropoleis. There are many uncertainties about this office, numerous though the references to it are in the papyri, and many must at present be left unsolved, but van Groningen's work marks a real advance in the discussion of the subject. *Le gymnasiarque des métropoles de l'Égypte romaine*. Groningue, Noordhoff, 1924. Pp. viii+164. Reviewed by J. G. M[ILNE] (*J.R.S.*, xvi, 1926, 132; important), P. JOUGUET (*Rev. ét. anc.*, xxvii, 1925, 261-3), M. HOMBERT (*Rev. belge de phil.*, iv, 1925, 743-8), and H. I. BELL (*Journal*, xi, 1925, 118-19; *Class. Rev.*, xxxix, 1925, 211).

S. DE RICCI discusses the inscription at Alexandria, Πτολεμαῖος στρατηγὸς πόλεως, published in 1893 by BOTTI, who gave the provenance as Alexandria but spoke of it as showing that Ptolemais had a strategus. There has been much controversy as to how this evidence should be treated. DE RICCI has now found in the note-books of the American Wilbour a copy of the inscription in which it is recorded that in May 1887 it was at Menshiyeh (Ptolemais), which settles the question. He notes that the year sign occurs at the end. It probably therefore belongs to the reign of Augustus or one of the later Ptolemies. *Le Stratège d'Alexandrie et le Stratège de Ptolémaïs*, in *Raccolta Lumbroso*, 299-301.

In letter lxxi to BRECCIA, LUMBROSO illustrates the practice of exhibiting laws and decrees for public inspection (in *Bull. Soc. Arch. d'Alex.*, No. 21, 38). For VON WOESS's *Urkundencasen*, see below, § 6, as also for NABER's articles on πτόμα and χάραγμα.

In a discussion of the edict of Hadrian published by JOUGUET in *Rev. ét. gr.*, xxxiii, V. MARTIN suggests some new readings in ll. 15-20 of copy A. as a result of which the two texts agree. He holds that *εἰς ἐνιαυσίους καταβολάς* means merely that cultivators were allowed to pay in successive instalments over several years. The concession only affected the current year. *L'Édit d'Hadrien de l'an 136 en faveur des cultivateurs égyptiens*, in *Raccolta Lumbroso*, 260-4.

In his article *Dike Corcéé in Roman Egypt* referred to above, § 3, W. L. WESTERMANN discusses the corvée for the maintenance of the dykes, giving a useful account of the technique of irrigation.

G. ROUILLARD's *Administration civile* has been reviewed by S. R[EINACH] (*Rev. Arch.*, xviii, 1923, 355).

A. STEIN, in an article on the Praefecti Praetorio, deals incidentally (p. 100 f.) with papyrus evidence. *Stellvertreter der Praefecti Praetorio*, in *Hermes*, lx (1925), 94-103.

G. ROUILLARD in an article on the title decurion attributed to Theodore, Duke of the Thebaid, is no doubt right in explaining it as a Byzantine court title; the decurion was, she says, probably the head of ten silentiarii. *De l'attribution du titre de decurion au duc de Thébaïde Théodore*, in *Byzantion*, ii (1925), 141-8.

Biography. G. LEFEBVRE brings further evidence that the Ποτασιμῶ of the Abou Simbel inscription, commanding the foreign (mainly Greek) detachments of Psammetichus, was a general of Psammetichus II, not I. He also suggests that the Ahmôse who had the "beau nom" of Neferibré-nekht was the Amasis of the Abou Simbel inscription. Ποτασιμῶ, in *Bull. Soc. Arch. d'Alex.*, No. 21, 48-57.

B. A. VAN GRONINGEN, in an interesting but necessarily (since the materials are very scanty) largely conjectural article, discusses the career of Cleomenes of Naucratis. He takes, on the whole, a favourable view of Cleomenes, rather more favourable indeed than the evidence justifies. He deals with Arrian's quotation from Alexander's letter, making a not very convincing attempt to explain away the evidence against Cleomenes. But the letter is certainly extraordinary. (The meaning may very likely have been, as GRONINGEN also suggests: If you see to the shrines and the Heroa of Hephaestion rightly, I will overlook any previous neglect [of religious duties] and even any future neglect [of this kind].) *De Cleomene Naucratis*, in *Mnemosyne*, liii (1925), 101-30.

D. COHEN has begun to publish a detailed study of Demetrius Phalereus, in which he proposes to deal with (i) his work at Athens, (ii) his measures at Alexandria, (iii) his connexion with the library. The first instalment is devoted to the Athenian part of his career only. In this COHEN takes a very favourable view of Demetrius, bringing out the way in which he translated into practice the political principles of the Peripatetic School. *De Demetrio Phalereo*, in *Mnemosyne*, N.S., liv (1926), 88-98.

A reference may be made to an article by W. KOCH on the early princesses of the Ptolemaic dynasty as illustrated by their coins. *Die ersten Ptolemaerinnen nach ihren Münzen*, in *Z. f. Num.*, xxxiv (1924), 67-106.

W. SPIEGELBERG raises the question why Cleopatra chose to die by the bite of a snake. His answer is that it was for cult reasons: "Dieser Schlangentod stellte Ägypten und der ganzen Welt noch einmal die

Göttlichkeit des ägyptischen Königtums ergreifend und gross vor Augen." He supports his explanation by citations from Josephus and Herodotus. *Stzgsber. Bay. Ak. Wiss.*, 1925, 2. Abh., *Ägyptologische Mitteilungen*. München. Pp. 35. 4 Plates. 1. *Weshalb wählte Kleopatra den Tod durch Schlangenbiss?*

In an appendix to his edition of two Graux papyri (see § 3 above) H. HENNE discusses, *a propos* of an article by CUMONT, the question whether the prefect Balbillus was the same as the astrologer Barbillus. He leaves it open, but the identity may now be regarded as very probable: see ROSTOVITZEFF's article on the Pax Augusta Claudiana referred to above. *Le préfet Ti. Claudius Balbillus et l'astrologue Barbillus*, in *Bull. Inst. Fr. d'Arch. Or.*, XXI (1923), 211-14.

In the first of what is apparently to be a series of articles, L. CANTARELLI deals with the prefect Juncinus. As regards date, he suggests 211-214 as the likeliest term. He further discusses the question of his identity with Juncinus, governor of Sardinia, deciding against it. Finally, he suggests "Flavius" as a not unlikely praenomen. *Per l'amministrazione e la storia dell'Egitto Romano: I. [Flavius] Baebius Aurelius Juncinus Praefectus Aegypti*, in *Aegyptus*, VII (1926), 282-4.

E. R. GOODENOUGH, in an interesting article, maintains that Philo was not, as usually thought, a mere scholarly recluse unused to public affairs till his famous embassy to Gaius. He translates a passage from the *De Spec. Legg.*, which he holds (surely with justice) to refer to earlier political activities, not to the embassy. *Philo and Public Life*, in *Journal*, XII (1926), 77-9.

BIDEZ's *L'Empereur Julien* (see *Journal*, XI, 98) has been much reviewed: by C. CESSI (*Boll. Fil. Cl.*, XXXI, 1924, 203-4), W. KOCH (*Museum*, Leiden, XXXII, 1924-5, 258-9), P. SHOREY (*Class. Phil.*, XX, 1925, 161-2), G. AMMON (*Phil. Woch.*, XLVI, 1926, 325-9), A. PUECH (*Rev. ét. gr.*, XXXVII, 1924, 462), G. RADET (*Rev. ét. anc.*, XXVII, 1925, 69-71), H. D[É]LEHAYE [*Anal. Boll.*, XLIV, 1926, 167], E. HOHL (*D. Lit.-Z.*, N.F., III, 1926, 427-8), and J. HUBAUX (*Rec. belge de phil.*, IV, 1925, 443-8).

S. GASELEE calls attention to the possibility that in P. Lond. 1929 we have an autograph letter of St. Athanasius. *An Autograph of St. Athanasius the Great*, in *The Christian East*, V (1924), 185-6. Reference may here be made to H. I. BELL's sketch of the career of St. Athanasius mentioned in § 2 above.

A. D'ALÈS discusses the correspondents of Paphnutius in *Jews and Christians in Egypt*, translating all the letters. He weighs the arguments for and against the Athanasian authorship of 1929, leaving the question undecided but with a tendency to incline to the negative side. Paphnutius he identifies with Paphnutius Cephalas. *Les correspondants de l'abbé Paphnoute*, in *Rec. d. Quest. Hist.*, LIII (1925), 110-18.

G. FURLANI discusses the biography in Arab sources of Johannes Philoponus, which he thinks a purely literary deduction from the chronological notice that he lived till the entry of 'Amr into Egypt. *Giovanni il Filopono e l'incendio della biblioteca di Alessandria*, in *Bull. Soc. Arch. d'Alex.*, No. 21, 58-77.

Topography. In *Aegyptus*, V, 1924, 356-7, is given a summary of a communication by A. CALDERINI read by CAPOVILLA at the Cairo Geographical Congress in 1925 entitled *Per una raccolta e uno studio integrale della toponomastica dell'Egitto greco-romano* (a motion on the subject was unanimously approved), of one by CAPOVILLA (p. 356), *I dati geografici nei papiri della società italiana*, and of another by CALDERINI, *Il nome Egitto, nei documenti locali dell'età greca e romana*.

B. A. VAN GRONINGEN discusses Alexander's motives in choosing the site of Alexandria. They were, he thinks, not quite those read into the foundation by scholars knowing the later history. Alexander was struck by the resemblance of the site to that of Tyre, whose place he intended Alexandria to take. Had he lived, coming to think of Persia rather than Greece as the centre of his Empire, he would very likely have revived Tyre. Alexandria owed its success to the failure of its founder's further projects. *A propos de la fondation d'Alexandrie*, in *Raccolta Lumbroso*, 200-11. E. BRECCIA emphasizes and accounts for the disappearance of ancient Alexandria, collecting evidence for the pillaging of the site in ancient and modern times. At the end he mentions that he is gathering materials for an inventory of Alexandrian monuments taken to the collections of Europe and America; he intends to collect in a special section of the Alexandrian Museum as many photographs and casts as possible. "*Etiam periere ruinae?*" in *Raccolta Lumbroso*, 1-11. LUMBROSO, in letter 72 to WILCKEN (*Archiv*, VIII, 60), collects some references to Alexandria as metropolis of the world. CALDERINI gives an account of LUMBROSO's great glossary of Alexandria, an immense collection of Alexandrian material which, it is good news to hear, there is a prospect of publishing. Specimens are given. *Il "Glossario Lumbroso" e la sua pubblicazione*, in *Aegyptus*, VI (1925), 227-46. S. BRECCIA publishes separately (*Bull. Soc. Arch. d'Alex.*, No. 21, 3-26) the first chapter of his work *Il porto di Alessandria d'Egitto* under the title *Cenni Storici sui porti d'Alessandria dalle origini ai nostri giorni*.

LUMBROSO in letter lxix to BRECCIA (*Bull. Soc. Arch. d'Alex.*, No. 21, 36) quotes from Caesar's *Bell. Alex.* some passages illustrating Alexandrian topography, and in letter lxviii (*ibid.*, 35) adduces evidence to show that the Museum and Palace were in Bruchium.

The Société Archéologique of Alexandria has published a handsome volume, by E. BRECCIA, the first of a series on monuments of Graeco-Roman Egypt, which deals with the ruins of Canopus and the temple of Pnepheros at Theadelphia. *Monuments de l'Égypte gréco-romaine*. Tome I. 1. *Le rovine e i monumenti di Canopo*; 2. *Teudelfiu e il tempio di Pniferôs*. Bergamo, Officine dell'Ist. ital. d'arti grafiche, 1926. Pp. 135. 76 Plates.

A. CALDERINI has commenced the publication of a very valuable piece of work on the topography of Oxyrhynchus. This contains a list of all Oxyrhynchite place-names known to him in a single alphabetical sequence, giving after the references and the description of the place (κώμη, ἐποίκιον, etc.; forms of name): (1) the position; (2) places near or named along with it; (3) buildings, etc. named there; (4) officials; (5) trades and professions; (6) products; (7) taxes, etc.; (8) contracts and other deeds; (9) prosopography. The first instalment, the only one published, reaches Ἐπι()τόποι. *Ricerche topografiche sopra il nomo Ossirinichite*, in *Aegyptus*, vi (1925), 79-92.

Chronology. The Early Ptolemaic calendar continues to exercise the minds of historians and papyrologists. EDGAR's theory, supplemented by BELOCH's addendum (see *Journal*, xi, 100), in the main holds the field, but E. MEYER, in an elaborate study of the subject published as the second *Beiheft* of the *Archiv*, has propounded a rival explanation. *Untersuchungen zur Chronologie der ersten Ptolemäer auf Grund der Papyri*. Leipzig and Berlin, Teubner, 1925. Pp. viii+90. This new theory has found little favour so far. BELOCH himself, in a reply to MEYER's book, shows that his basic hypothesis (that Energetes's reign began on 27 or 28 Loos) is inconsistent with the papyrus evidence, that the system is therefore fundamentally unsound and further irreconcilable with the evidence of papyri, and defends his own theories against MEYER's criticisms. *Zur Chronologie der ersten Ptolemäer*, II, in *Archiv*, viii, 1-10. W. W. TARN, in a review (*Class. Rev.*, xl, 1926, 86-7), is also rather sceptical. MEYER's work is also reviewed by FR. GEYER (*Hist. Z.*, cxxxiii, 1925, 528-9). Meantime E. CAVAIGNAC, in a short article, had tried, as he puts it, to "explain psychologically why the Macedonian calendar under Philadelphus got out of gear." *Le calendrier ptolémaïque*, in *Rev. belge de phil.*, II (1923), 447-52.

Another vexed question, that of the regnal years of the Roman Emperors in the third century, has also been receiving some attention. In the review of VOGT's *Die alexandrinischen Münzen*, referred to above, MATTINGLY had criticized A. STEIN's theory (see *Journal*, x, 164 f.). STEIN replies to MATTINGLY in a note. *Nochmals zur Chronologie der römischen Kaiser*, in *Archiv*, viii, 11-13. A reply by MATTINGLY appears in the present number. P. SCHNEBEL, from a different point of view, also rejects STEIN's theory, maintaining that the supposed discrepancy between the Alexandrian coins and the papyri of Middle and Upper Egypt is illusory. The evidence of these two sources agrees; Aurelian's *dies imperii* fell before 29. viii. 270, Claudius's death not long before. After the fall of Vaballathus the chronology was correct, the reckoning 271-2=3 Aurelian being introduced into Egypt. Not the 16th year of Gallienus but the 3rd of Claudius was regarded by the Alexandrian chronographers as the superfluous year. SCHNEBEL deduces that the breach between Aurelian and Vaballathus fell, not in the spring of 271, but in that of 272. The conquest of Palmyra was not before August 272, the freeing of Syria and Egypt in the summer of 272. *Die Chronologie Aurelians*, in *Klio*, xx (1925-6), 363-8. STEIN replies to this article, decisively rejecting SCHNEBEL's theories on the ground mainly that they are inconsistent with the numismatic evidence. He maintains his own theory, which he points out is conjectural but for the present the safest hypothesis. *Zeitbestimmungen von Gallienus bis Aurelian*, in *Klio*, xxi, 78-82.

5. SOCIAL LIFE, EDUCATION, ART, ECONOMIC HISTORY, NUMISMATICS AND METROLOGY.

General. W. OTTO has published a brilliant sketch of the *Kulturgeschichte* of the ancient world. It is not exactly a history but rather a review of recent literature on the subject; and yet it is more than a mere review and gives a connected account of cultural development in so far as this falls within the purview of the books referred to. *Kulturgeschichte des Altertums*. München, C. H. Beck, 1925. Pp. x+175. Reviewed by M. GELZER (*Gnomon*, II, 1926, 198-205; very interesting; critical but appreciative), EHRENBURG (*Hist. Z.*, cxxxiv, 1926, 53-6; favourable, though critical), F. RIBETTO (*Riv. Indo-Greco-Ital.*, x, 1926, 111-14), N. H. BAYNES (*J.R.S.*, xv, 1925, 107-8; recognizes the value of the work but strongly censures OTTO's view of Rome), E. HOHL (*Phil. Woch.*, xlv, 1925, 1291-2), and H. I. BELL (in this number).

A very important work, eagerly looked for and now published, is M. ROSTOVITZEFF's *The Social and*

Economic History of the Roman Empire (Oxford, Clarendon Press, 1926. Pp. xxv+695. 60 Plates). ROSTOV'TZEFF, who of course makes much use of papyrus evidence, deals with many subjects and brings his acute and critical intelligence to bear on many problems, but in particular he develops further the idea, sketched in an article in the *Musée belge* (see *Journal*, xi, 97), that the collapse in the 3rd century was in large measure due to the hostility of the army, representing the peasantry, to the bourgeoisie. His conclusion (p. 486 f.) is interesting but likely to provoke some dissent (the final sentence in particular is perhaps a too narrow and hasty generalization from the experience of the Graeco-Roman world): "Our civilization will not last unless it be a civilization not of one class, but of the masses. The Oriental civilizations were more stable and lasting than the Greco-Roman, because, being chiefly based on religion, they were nearer to the masses. Another lesson is that violent attempts at levelling have never helped to uplift the masses. They have destroyed the upper classes, and resulted in accelerating the process of barbarization. But the ultimate problem remains like a ghost, ever present and unaid. Is it possible to extend a higher civilization to the lower classes without debasing its standard and diluting its quality to the vanishing point? Is not every civilization bound to decay as soon as it begins to penetrate the masses?" The volume has already been reviewed by W. L. WESTERMANN (*The Nation*, New York, cxxiii, 1926, 368-70; laudatory though critical) and H. LAST (*J.R.S.*, xvi, 1926, 120-8; important; while stressing the merits and value of the book, vigorously challenges many of ROSTOV'TZEFF's views).

Social life. Under this heading a reference may be made to an article, in the form of a review of ROSTOV'TZEFF's *Large Estate*, by H. I. BELL on the Zeno papyri, which deals with them specially from the point of view of their interest as a picture of life in the Egypt of the 3rd century B.C. *A Greek Adventurer in Egypt*, in *Edinburgh Review*, ccxliii (1926), Jan., 123-38.

J. G. MILNE, in an article on the meals "at the table of Sarapis," suggests that these were not really cult meals but dining clubs which met (partly for precautionary reasons, because the Roman Government disliked clubs) under the cloak of religion. They might meet anywhere; Sarapis was the patron. As one invitation is to the Demetreion, MILNE suggests that temples might run a restaurant. *The Kline of Sarapis*, in *Journal*, xi (1925), 6-9.

In letter lxxii to BRECCIA (*Bull. Soc. Arch. d'Alex.*, No. 21, 39) LUMBROSO discusses the meaning of *πηλούσιος*, Pelusiae in passages he quotes from Jo. Lydus and Julius Capitolinus.

In some notes on Greek graffiti contained in the second part of BAILLET's *Inscriptions grecques et latines des tombeaux des rois ou syringes à Thèbes*, M. N. TOD convincingly and amusingly explains one which puzzled BAILLET as being an ancient (almost exact) parallel to the modern "Does your mother know you're out?" The other notes are concerned chiefly with names. *Notes on Some Greek Graffiti*, in *Journal*, xi (1925), 256-8.

In letter 74 to WILCKEN (*Archiv*, viii, 74) LUMBROSO calls attention to the mention in III Maccab. of a tower in the royal court and the use of houses with towers in Egypt. In letter lxiv to BRECCIA (*Bull. Soc. Arch. d'Alex.*, No. 21, 30-1) he discusses the use of passports for leaving Alexandria (Strabo and P. Oxy. 1271), and the position of the Roman prefect as taking the place of the kings; and in letter lxx (*ibid.*, 37) he quotes with approval from MÉAUTIS's *Hermoupolis-la-Grande* a passage on the part played by athletics towards linking the Empire together.

Education, Science, and Art. In P. Bad., Heft 4 (see above, § 3), No. 111 is a school-tablet, each syllable being separated by a space. This marking of syllables was of course a recognized practice in ancient schools. In Part II of *The Monastery of Epiphanius* (above, § 3) are a number of school pieces (611-20), some of which were noted above in § 1 as being literary, but they must also be referred to here as illustrations of monastic education in the 6th-7th century. Besides the *Iliad*, Menander, and Anthology quotations there are also: 617, a list of Coptic months; 618, a list of days of the week; 619, Greek ordinal numbers; 620, Greek alphabet and exercise. A reference must also be made to the catalogue of books (5th or 6th cent.) published by WESSELY and noted in § 2. "Alia tempora, alii libri," exclaims WESSELY; there are no Socratic dialogues here but only theology. (Yet the texts in *The Monastery of Epiphanius* just referred to show that even in monastic schools classical literature was not utterly forgotten, though it probably survived mainly in the form of "elegant extracts.")

QU. VETTER, à propos of P. Mich. 621, discusses Egyptian mathematics with special reference to the method of dividing. *Quelques remarques sur le papyrus mathématique no. 621 de la Michigan Collection*, in *Class. Phil.*, xx (1925), 309-12.

In an article on the medical uses of the bat, W. R. DAWSON uses the evidence of Greek, Coptic and Egyptian papyri. *Bats as Materia Medica*, in *Annals and Mag. of Nat. Hist.*, Ser. 9, xvi, 221-7.

A. OSBORNE has published a catalogue of his collection of terracotta lamps. E. BRECCIA contributes a preface. *Lychnos et Lucerna*. (Société Archéologique d'Alexandrie.) Alexandrie, Soc. de Publications Égyptiennes, 1924. Pp. 18. 7 Plates.

Finance, Agriculture, Industry. V. MARTIN, in a readable and penetrating study of Roman financial policy, shows how thoroughgoing and ruthlessly efficient in its working and at the same time how short-sighted and how disastrous in its effects was the Roman financial policy in Egypt. The paper was a lecture given at the University of Geneva on 26 Oct., 1925. *La fiscalité romaine en Égypte aux trois premiers siècles de l'Empire: ses principes, ses méthodes, ses résultats*. Genève, Georg et Cie, 1926. Pp. 31.

Publishing a Columbia Zeno papyrus (see above, § 3), W. L. WESTERMANN appends an interesting and valuable discussion of the taxes on vineyards and orchards. He gives a translation and explanation (I am not convinced that this is correct) of P. Edgar 38, and also translates B.G.U. 1307, MEYER, *Gr. Texte*, ostr. 2, and P.S.I. 508. He holds that the money for the wine was paid to the bank and that when the Government had taken its quota the surplus was left to the account of the cultivator. He also considers that in P.S.I. 508 Zeno was oeconomus. *Orchard and Vineyard Taxes in the Zenon Papyri*, in *Journal*, XII (1926), 38-51.

J. G. MILNE collects, tabulates, and examines instances of double entries in Ptolemaic tax-receipts, showing that there is (apart from exceptional cases) a regular ratio. The result is to confirm substantially the view of GRENFELL and HUNT that the higher figures are the sums actually paid and the lower those credited in respect of the tax after deduction of the extra charges. *Double Entries in Ptolemaic Tax-Receipts*, in *Journal*, XI (1925), 269-83.

F. LOT, in a study of the Byzantine "caput," decides that a *jugum* corresponded to "une quantité de terrain égale au moins à une douzaine, peut-être à une quinzaine d'hectares, mais à coup sûr, inférieure à cinquante hectares." On the whole he thinks it safe to reckon "sur des terres labourables" the conventional figure of 25 hectares or 100 jugera. His conclusion is: "j'oserai même...avancer maintenant que le *jugum* ou *caput* c'est toute exploitation rurale dont le revenu permet de payer une somme consacrée, sept sous d'or, à mon avis." He defends Ammianus's statement that Julian found on reaching Gaul 25 solidi per *caput* as the rate and left Gaul with the charge reduced to 7. He supports it by a long examination of the evidence, including Egypt. *De l'étendue et de la valeur du "caput" fiscal sous le bas-empire*, in *Rev. hist. de droit fr. et étr.*, 4 Sér., IV (1925), 5-60, 117-92.

L. FIESEL has published an elaborate study of the frontier customs dues (*Geleitszolle*) in Graeco-Roman Egypt as compared with mediaeval practice. *Geleitszolle im griechisch-römischen Ägypten und im germanisch-romanischen Abendland*, in *G.G.N.*, 1925, 57-107. In another article he treats specially of the connexion between the two, deriving the mediaeval *Zollgeleit* from Egypt, via the Arabs. *Woher stammt das Zollgeleit?*, in *Vierteljahrsschr. f. Soz. u. Wirtschaftsgesch.*, XIX, 385-412.

SCHNEBEL's *Landwirtschaft* has been reviewed by E. KIESSLING (*Gnomon*, I, 1925, 348-53; interesting; laudatory), E. KORNEMANN (*Klio*, XX, 247), V. ARANGIO-RIIZ (*Boll. Fil. Class.*, XXXII, 1925, 200-2), W. ENSSLIN (*Phil. Woch.*, XLVI, 1926, 793-801; laudatory), and A. CALDERINI (*Aegyptus*, VII, 1926, 332-3).

G. CORRADI reviews RICCI's *Coltura della Vite* (see *Journal*, XI, 102) along with CALDERINI's ΘΗ-ΣΑΥΠΟΙ and CALDARA's *Connotati*, in *Boll. Fil. Class.*, XXXII (1925), 106-7.

CH. DUBOIS publishes separately an account of the olive in ancient Egypt, part of a work in preparation to be called *L'olivier et l'huile d'olive dans l'antiquité*. After an introduction he deals with (1) Pharaonic times, (2) the Ptolemaic period (chiefly the 3rd cent. B.C.), making thorough use of the papyri. *L'Olivier et l'huile d'olive dans l'ancienne Égypte*, in *Rev. de Phil.*, XLIX (1925), 60-83.

In two articles A. E. R. BOAK deals with irrigation in the Fayyum. In one (*Irrigation and Population in the Faijūm, the Garden of Egypt*, in *Geogr. Rev.*, XVI, 1926, 353-64) he gives a geographical account of the district with a summary of the history of irrigation and population. He includes plans and views. In the other (*Notes on Canal and Dike Work in Roman Egypt*, in *Aegyptus*, VII, 1926, 215-9) he gives an extremely interesting and valuable account of his observations on the Wahabi Abdullah canal near Karanis, showing how rapidly a canal tends to become obstructed, and describing the methods of clearing now employed. Arguing from modern practice, he suggests, very plausibly, that the naubion "was estimated as a fixed number of basket loads of a standard size." He amplifies the idea of ἀφύλισμός (see WESTERMANN's article above, § 3) to include the removal of brushwood. [It seems to me, in view of what he says, that this may be the primary meaning, the notion of removing sediment and earth being secondary.]

An important work, which I have unfortunately been unable to see, has been published by A. E.

PERSSON under the title *Staat und Manufaktur im römischen Reiche* (Lund, 1923). It is reviewed by M. A. LEVI (*Boll. Fil. Class.*, XXXI, 1925, 211; laudatory).

In letter lxii to BRECCIA (*Bull. Soc. Arch. d'Alex.*, No. 21, 28), LUMBROSO, à propos of a marvellous piece of weaving from Ka-hmir in the Wembley exhibition, recalls a passage of Pliny which mentions a similar triumph of the textile art at Alexandria.

Numismatics and Metrology. I have mentioned above (§ 4) but must recall here VOGT's two works on the Alexandrian coinage.

A. SEGRÈ has sent me an off-print of an article, without a note of the periodical whence it comes (qu. *Studi di Fil. Class.*?), in which he traces the devaluation of the Ptolemaic bronze coinage from the 3rd century B.C. down to the end of the 2nd century B.C., when it reached, as shown by B.G.U. VII, 1532, the ratio of 500 : 1 to the silver drachma which it kept till the 2nd century of our era. *La svalutazione della moneta di bronzo tolemaica*.

J. G. MILNE deals with a hoard of late Roman coins found by BRUNTON at Qau el-Kebir in 1925. Among them were a number of coins which were not Imperial coins and apparently not ordinary forgeries but miniature copies. MILNE suggests that they were struck by one of the great feudal houses of Egypt. *Feudal Currency in Roman Egypt*, in *Ancient Egypt*, 1926, 5-9. In another article, on two recent finds and older hoards, he repeats this suggestion, and, finding many "copies" and also occasional non-Roman coins, he concludes that "the bronze coinage in Egypt was effectively demonetized [in the 5th century], and reduced to the same level as, for instance, cowries in some uncivilized countries." *The Currency of Egypt in the Fifth Century*, in *Numism. Chron.*, 5th Ser., VI, 1926, 43-92.

H. THOMPSON translates P. Dem. Heidelberg 1289, published in facsimile by SPIEGELBERG, with a partial translation, and discusses its metrological evidence. *Length-Measures in Ptolemaic Egypt*, in *Journal*, XI (1925), 151-3. H. SOTTAS seeks to carry his results further, clearing up the difficulty of an unexplained sign, which yields the complete name $\Psi\Upsilon\Omega\ \Pi\text{ΚΗΜΕ} = \sigma\chi\omicron\iota\nu\omicron\varsigma\ \text{Αἰγυπτίος}$. He suggests that the document is perhaps a ready-reckoner used in the postal service to fix the distances travelled. *Les mesures itinéraires ptolémaïques et le papyrus démotique 1289 de Heidelberg*, in *Aegyptus*, VII (1926), 237-42.

A. SEGRÈ discusses the artaba of 30 choenices recorded in P. Edgar 71 and its bearing on Jewish metrology. *Una nuova misura palestinese nel "P. Edgar" 71*, in *Studi di Fil. Class.*, N.S., IV (1926), 83-4.

6. LAW.

General works. The fourth instalment of P. M. MEYER's invaluable *Juristischer Papyrusbericht*, covering the period Oct. 1923-Nov. 1925, appeared in *Z. Sav.-St.*, XLVI (1926), 305-49.

I have not seen the fifth edition of P. F. GIRARD's *Textes de Droit Romain publiés et annotés* (Paris, Rousseau, 1923).

E. WEISS's *Griechisches Privatrecht* (see *Journal*, XI, 103) has been reviewed by H. F. J. (*J.H.S.*, XLV, 1925, 287-8; favourable; some criticisms), K. LATTE (*Gnomon*, I, 1925, 255-64; critical; very guarded praise: "eine willkommene, wenn auch nicht ganz zuverlässige Übersicht über das bisher Geleistete"; shows "Mangel an geschichtlicher Anschauung"), V. EHRENBERG (*Phil. Woch.*, XLV, 1925, 586-92), and U. KAHRSTEDT (*D. Lit.-Z.*, N.F., I, 1924, 2493-6; favourable).

The second part of R. MAYR's vocabulary to the Codex, which contains the Greek words and is due to M. SAN NICOLÒ, is most welcome and will be of immense service to all who have to deal with questions of Roman law, as well as to students of the Greek language in its later phases. *Vocabularium Codicis Justiniani: Pars altera (Pars Graeca)*, Pragae, Česká Grafická Unie A. S., Lipsiae, Alfred Lorentz, 1925. Pp. 501. Reviewed by GRADENWITZ (*Z. Sav.-St.*, XLVI, 1926, 412-13).

R. TAUBENSCHLAG shows in the various spheres from pre-Diocletian constitutions the influence of local law. His conclusion is "une nouvelle confirmation de la thèse de Mitters d'après laquelle les éléments locaux se sont conservés presque dans tous les domaines du droit local après la *constitutio Antoniniana*." "L'élément local était invincible et se préparait à la transformation du droit officiel conformément à son esprit." *Le droit local dans les constitutions pré-dioclétiennes*, in *Mélanges de Droit Romain dédiés à Georges Cornil*, 1926, 499-512.

G. SEGRÈ publishes a lecture, given on 5 Nov. 1923, to inaugurate the academic year 1923-4 at Turin, on Graeco-Oriental elements in the private law of the West. *Elementi elleno-orientali del diritto privato dell' alto medioevo in Occidente*. Torino, E. Schioppa, 1924. Pp. 31.

R. TAUBENSCHLAG reviews E. SACHAU's *Syrische Rechtsbücher*, Vol. III (*Z. Sav.-St.*, XLV, 493-514).

P. COLLINET maintains that Berytus was the centre through which constitutions destined for the East

were transmitted and the depot in which copies were kept. The early codifiers derived their material from this archive. The arrangement dates back at least to 196, perhaps to Marcus Aurelius or Commodus. *Beyrouth, centre d'affichage et de dépôt des constitutions impériales*, in *Syria*, 1924, 359-72.

The Document. M. SAN NICOLÒ gives an interesting sketch of the development of the formulary of Babylonian contracts. *Zur Entwicklung der babylonischen Urkundenform*, in *Festschrift für Gustav Hamnsek* (13 pages).

W. SPIEGELBERG shows strong reasons for believing that in ancient times in Egypt independent documents concerning a single legal transaction were exceptional. The transaction was oral, being a repetition of stereotyped formulae. These were written down in the form of a protocol, and hence arose the document. *Ägyptologische Mitteilungen* (see § 4), v. *Der Ursprung und das Wesen der Formelsprache der demotischen Urkunden*.

F. VON WOESS's *Urkundenwesen* (see *Journal*, XI, 99) is reviewed by A. VON PREMERSTEIN (*Hist. Z.*, cxxxii, 1925, 481-4; laudatory; differs in some points from VON WOESS), F. PRINGSHEIM (*Viertelj. f. Soz. u. Wirtschaftsgesch.*, xviii, 1925, 402-3), and E. RABEL (*Z. Soc.-St.*, xlv, 1925, 519-37; laudatory; accepts main conclusions as to the "Grundbuch" theory; an important review).

A. SEGRÈ has been devoting a good deal of attention to documentary law. In an article entitled *Note sul documento nel diritto greco-egizio* (*Bull. Ist. Dir. Rom.*, xxxiv, 67-161) he discusses, firstly, the cancellation of documents. A loan in the form of a public document must be cancelled by a public document, in that of a chirograph by the return of the chirograph. If the chirograph was published another must be drawn up, with restitution of the copy of the first. An independent bank-*διαγραφή* could cancel a public document. A Demotic document of credit was usually cancelled by the mere restitution of the document, even when registered. Probably a receipt was given only in the early years of the Imperial period. In the Ptolemaic age, but not in the Roman, agoranomic documents circulated in the original form. Secondly, he discusses the *κρύα* clause in documents. His final conclusion is: "nella clausola al portatore, almeno in diritto greco-egizio, non mi pare si possa vedere che una clausola atta a facilitare la riscossione del credito ad un terzo portatore del documento di credito." *Note sul documento greco-egizio del graphieion* (*Aegyptus*, vii, 1926, 97-107) is an interesting and useful article in which he deals with the important evidence of the Fuad papyri (P.S.I. 901-18) and those from the same archive in the University of Michigan. Two further articles, which I have received too late for study before this bibliography goes to press, are *I documenti agoranomici in Egitto nell'età imperiale* (*Bull. Ist. Dir. Rom.*, 1926, 61-8) and *Note sulla forma del documento greco-romano* (*ibid.*, 69-104).

I referred last time to the first instalment of F. BILABEL's *Zur Doppelausfertigung ägyptischer Urkunden*. This article has now been concluded (*Aegyptus*, vi, 1925, 93-113). BILABEL here deals with Demotic double deeds, giving a list, examples outside Egypt, especially those from Avroman, agoranomic examples (list given), and *σίμβολα διπλὰ ἐσφραγισμένα* (list). There is no connexion, he holds, between Babylonian "case-tablets" and the Graeco-Egyptian double deed, which arose in Hellenistic Egypt. In an appendix he publishes a Munich and a Heidelberg document of this class.

J. G. NABER, who has started a new series of articles under the title *Observationes ad papyros irridicæ*, devotes the first two to a discussion of the terms *πτῶμα* and *χάραγμα* in connexion with the registration of documents. § 1-10. ΠΕΡΙ ΠΤΩΜΑΤΩΝ, in *Memosyne*, liii (1925), 417-45, and § 11-14. ΠΕΡΙ ΧΑΡΑΓΜΑΤΩΝ, *ibid.*, liv, 1926, 42-76.

Status. P. Giss. 401, hitherto supposed to be the *Constitutio Antoniniana*, has received a great deal of attention lately. V. CAROCCI has published a very elaborate and profusely documented discussion of all the questions raised by it, with a survey of previous contributions to the subject, and with a facsimile of the edict. He produces MEYER's original transcript, his later one, and that of G. SEGRÈ (see *Journal*, x, 162 and below), with whose views, in the main, he agrees. He collects the ancient literary evidence. His general conclusions are: I. The papyrus is probably part of a collection of Imperial ordinances posted at Alexandria. II. The date of the edict in question is certainly after the death of Geta (in any case 1 Jan. 212), but may be before or after 11 July 212, when the second ordinance was promulgated. III. Caracalla's principal motives were fiscal, his secondary, to gain support after Geta's murder, and religious. IV. The concession applied to the free inhabitants of the Empire and was general. In part it was purely personal because the constitutions of cities were left, but there was a limitation in the exclusion of communities which were *stipendiarii*. In an appendix CAROCCI seeks to prove the existence of *peregrini dediticii* under the principate. La "Constitutio Antoniniana": *Studi di papirologia e di diritto pubblico romano*, in *Atti d. R. Acc. d. Lincei*, cccxxii (1925), S. VI, I. Roma, G. Bardi, 1925. Pp. 136. 1 Plate.

Meanwhile G. SEGRÈ had published a more elaborate treatment of the subject than in his previous article (see *Journal*, x, 162), though on the same lines (*L'editto di Caracalla sulla concessione della cittadinanza romana e il papiro Giessen 40*, 1, in *Studi in onore di Silvio Perozzi*, 139-219), and P. M. MEYER had made a very cogent reply to SEGRÈ's theory (*Zur Constitutio Antoniniana*, in *Z. Soc.-St.*, XLVI, 1926, 264-7). And all the time (if I may be allowed to quote Serjeant Buzfuz in *Pirkwick*) "the train was laid, the mine was preparing, the sapper and miner was at work." E. BICKERMANN has published a brilliant doctoral thesis in which he maintains, with considerable plausibility—that P. Giss. 40 is not the famous Constitution after all! He shows that the existing text is in part irreconcilable with the palaeographical evidence and that it could not mean what it is required to mean. Further, he maintains that the word *dedicium* could not be applied to the Egyptians. So far he seems likely to meet with a good deal of assent. His more positive suggestion is more disputable and his supplements are still more so. His theory is that the edict is really an extension of the *Constitutio Antoniniana* to the barbarian immigrants, issued after the victory over the Alemanni, and therefore in the autumn of 213. This could only happen after *all* provincials had received the citizenship. He proceeds to show, very convincingly, chiefly by papyrus evidence, that they had actually done so. The presence or absence of the nomen Aurelius is no evidence for or against citizenship, but only for the class of document in which it is observed. It will be interesting to see what scholars who have "put their money on" the old theory will reply to this revolutionary work. (As this goes to press I receive an article by A. SEGRÈ, *La Costituzione Antoniniana*, from *Riv. di Fil.*, N.S., IV, 1926, 471-87.) *Das Edikt des Kaisers Caracalla in P. Giss. 40*. Berlin Diss., A. Collignon, 1926. Pp. 39.

Inheritance and the Family. P. KOSCHAKER has published an interesting article on the Dura parchments, with special reference to the law of inheritance. He holds ἐὰν δὲ μηθεὶς, τοῦ νόμου ἀδελφοὶ ὁμ[ο]γ[α]τρῖοι to be a gloss which has got out of place. *Zu den griechischen Rechtsurkunden aus Dura in Mesopotamien*, in *Z. Soc.-St.*, XLVI (1926), 290-304. He has also published an article, to which brief reference may here be made, on Sumerian contracts relating to inheritance and marriage. *Beiträge zum altbabylonischen Recht*. I. *Sumerische Erb- und Ehepakte aus Nippur*. II. *Zu § 142, 143 KH.*, in *Z. f. Assyriol.*, N.F., I (xxxv), 192-212.

An interesting review of KRELLER's *Erbrechtliche Untersuchungen*, with references to P. Lond. 1709 and P. Oxy. 1829, has been published by A. STEINWENTER (*Krit. Vierteljahrsschr. f. Ges. u. Rechtsw.*, 3. Folge, XXI, 160-70).

Use is made of papyri in a work by E. LEVY, *Der Hergang der römischen Ehescheidung*, Weimar, H. Böhlau Nachfolger, 1925. Pp. vii+159. The same subject is treated by S. SOLAZZI in an article which, though mainly concerned with Roman law, deals with papyrus evidence (P. Flor. 36, pp. 23-7, P. Flor. 93, p. 305, p. 310¹, other papyrus references). *In temi di divorzio*. I. *Il divorzio della "filia familias"*, in *Bull. Ist. Dir. Rom.*, XXXIV (1925), 1-28; *Studi sul divorzio*, II. *Il divorzio della libertà*, III. *Il divorzio senza forme*, *ibid.*, 295-319.

F. MAROI publishes an article on the adoption of exposed infants. *Intorno all'adozione degli esposti nell'Egitto romano*, in *Raccolta Lumbroso*, 377-406. Reviewed by V. ARANGIO-RUIZ (*Boll. Fil. Cl.*, XXXI, 1925, 177-8). I know only from a review by E. S. FORSTER (*Class. Rev.*, XL, 1926, 200-1) a work by P. S. PHOTIADIS on the institution of ἀποκήρυξις. Ἡ ἀποκήρυξις ἐν τῷ Ἀρχαίῳ Ἑλληνικῷ Δικαίῳ. Athens, Eleutherudakis and Barth, 1925. Pp. 53. 25 Drachmas.

A reference must here be made to S. LURIA's *Vater und Sohn in den neuen literarischen Papyri* (see § 1).

S. SOLAZZI discusses the question of the *cessio hereditatis* in P. Ryl. 117. P. Ryl. 117, in *Raccolta Lumbroso*, 246-52. L. GUENOUN's *La cessio bonorum* is reviewed by P. JOUGUET (*Rev. ét. anc.*, XXVII, 1925, 259-60).

I must here refer to BRÜCK's elaborate work *Totenteil und Seelgerat im griechischen Recht* noticed above in § 1.

Property and obligation. I know only from a review by A. STEINWENTER (*Krit. Vierteljahrsschr. f. Ges. u. Rechtsw.*, 3. Folge, XXI, 170-90) a work by H. STEINER, *Datio in solutum*. STEINER himself makes no use of papyri, but STEINWENTER's review contains some important remarks on them (pp. 182-4, 189-90), especially on the class of document described by some as *datio in solutum*; he regards it as *Prænumerationskauf*.

R. TAUBENSCHLAG discusses the various ways in which provision is made in contracts for ingress and egress and the legal aspect of the question. He concludes that it is best "das Recht auf εἴσοδος und ἐξόδος nur als Pertinenz (als Immobilienzubehör) aufzufassen." *Das Recht auf εἴσοδος und ἐξόδος in den Papyri*, in *Archiv*, VIII, 25-33.

I know only from a reference by P. M. MEYER a work by SCHÖNBACER, *Beiträge zur Geschichte des Liegenschaftsrechts*, which evidently deals *inter alia* with papyri.

B. BRUGI discusses the evidence of P. Stud. Pap. XXII, 131 for the law as to responsibility for damage to neighbouring property. *Rapporti di vicinanza tra edifici in un papiro di Soknopoion*, in *Raccolta Lombroso*, 302-4.

KUNKEL, in an article on *Diligentia* in *Z. Sav.-St.*, XLV, 266 ff., makes some use of papyrus material.

Associations. A. STÖCKLE reviews SAN NICOLÒ's *Vereinswesen*, II, 1 (*Byz. Z.*, XXV, 1925, 170-2).

Process. A. STEINWENTER reviews M. WLASSAK, *Das klassische Prozessformel* (*Stzgsber. Wiener Ak.*, CCII. 3. Abh., 1924. Pp. 249). The work itself is not papyrological, but in his review STEINWENTER (pp. 379-82) discusses the Greek law as to *πρόσκλησις* with papyrus references. In *Z. Sav.-St.*, XLVI (1926), 373-83.

L. WENGER's *Praetor und Formel* (*Stzgsber. Bay. Ak. Wiss.*, 1926, 3. Abh., München, 1926. Pp. 122), received just as this goes to press, has some papyrus references. I must refer also to another important work by WENGER, his *Institutionen des römischen Zivilprozessrechts*, München, M. Hueber, 1925. Pp. xi+355.

J. C. NABER, in § CXXI of his *Observationculae de iure Romano*, refers (*Mnemosyne*, LIII, 1925, 51-2) to P. Tebt. 286=Mitteis, *Chrest.* 83.

The new Oxyrhynchus documents exemplifying the process *per libellam* have attracted a good deal of attention. I have noted the following articles on them: P. COLLINET, *Les P. Orig. 1876-1882 et la procédure par libelle avant Justinien*, in *Rec. hist. dr. fr. et étr.*, 4 S., III (1924), 720-5; A. STEINWENTER, *Neue Urkunden zum byzantinischen Libellprozeß*, in *Festschrift für Gustav Hamnisek* (16 pages); L. WENGER, *Neue Libellpapyri*, in *Raccolta Lombroso*, 325-34.

A. STEINWENTER has contributed to the series *Münchener Beiträge zur Papyrusforschung und Antiken Rechtsgeschichte* (Heft 8) a monograph entitled *Die Streitbeendigung durch Urteil, Schiedspruch und Vergleich nach griechischem Rechte* (München, C. H. Beck, 1925. Pp. x+205), which, though dealing mainly with classical Greek law and that seen in inscriptions, refers on occasion to papyri. Reviewed by K. LATTE (*Gnomon*, II, 1926, 209-12; favourable).

D. ENSSLIN studies the interesting Princeton papyrus published by DEWING. *Ein Prozessergleich unter Klerikern vom Jahre 481* (*Zu Papyrus Princeton 55*), in *Rhein. Mus.*, N.F., LXXV, 422-46.

Finally, a reference may be made to TAUBENSCHLAG's article on the law of MENANDER's *Epitrepontes*, for which see § 1.

Sanctuary. F. VON WOESS's *Asylwesen* has been reviewed by FR. PRINGSHEIM (*Viertelj. f. Soz. u. Wirtschaftsgesch.*, XVIII, 1925, 399-402; laudatory; evidently thinks it better on the social and political than on the legal side), D. COHEN (*Museum*, Leiden, XXXII, 1924-5, 246-8), G. HELBIG (*Theol. Lit.-Z.*, XLIX, 1924, 509-10; laudatory; prefers WILCKEN's view of the *κατοχή*), and J. G. T[AIT] (*J.H.S.*, XLVI, 1926, 143-4; important for the Persians of the Epigone). In an article *Ἀσυλία* in *Z. Sav.-St.*, XLVI (1926), 32-67, VON WOESS supplements his book with non-Egyptian examples of asylum and some new Egyptian ones. He upholds his theory of the Epigone and his view of the *κατοχή*. He brings forward some good arguments on the last point, which, however, though they give additional support to his view, fail to convince me that he is right.

7. PALAEOGRAPHY AND DIPLOMATIC.

A very important publication under this head is a handbook of Greek palaeography by W. SCHUBART. Though it bears the wider title, its subject is, strictly speaking, the palaeography of Greek papyri rather than Greek palaeography in general, since SCHUBART, although he adds a section on mediaeval minuscule script, treats this part of his theme only summarily, confessing himself "not at home" on this subject and confining himself to the no doubt excellent but far from exhaustive selection of facsimiles in CAVALIERI and LIETZMANN's *Specimina Codicum Graecorum Vaticanorum*. It is the first section of the book, that dealing with the script of papyri, to which students will mainly turn, and indeed it would perhaps, in the circumstances, have been better to cut out the second part altogether and devote the space saved to even fuller illustration of the papyrus hands. Here SCHUBART is a master, and his work is of immense value, for KENYON's earlier treatment of the subject is now out of date, and a comprehensive guide to it, making use of recent material, was badly needed. There are numerous and good facsimiles, and besides these SCHUBART constantly makes use of the handy and wonderfully cheap volume *Papyri Graecae Berolinenses*

which he himself contributed to the series *Tabulae in Usam Scholarum*. Not only is his treatment far fuller than any which has preceded it, but he handles the subject in a different way, seeking to write, in some sort, a history of style in handwriting. There are points on which one feels inclined to challenge his views, but that merely shows that he makes an individual approach to the subject and is not content to repeat received opinions. More serious complaint might be made in some matters of form. The utility of a book of this kind does not end with a single reading; it is inevitably used as a handy work of reference, as a storehouse of examples by which one may refresh one's memory of hands and with which new papyri may be compared. But as such its utility is seriously impaired by the fact that the facsimiles have no descriptions under them; it is sometimes a lengthy business to find the date, reference and transcripts of any given plate, and the transcripts are rendered still more difficult to collate with the facsimiles by the fact that they are printed continuously, without separation of lines. It is much to be hoped that in a second edition an improvement will be made in this respect. This however is only a formal blemish; the volume is a real achievement, and SCHUBART has rendered papyrology and palaeography a valuable service. *Handbuch der Altertumswissenschaft* (I. v. MÜLLER, new ed. by W. OTTO), I. Band, 4. Abteilung, 1. Hälfte: *Palaeographie*. Erster Teil. *Griechische Palaeographie*. München, C. H. Beck, 1925. Pp. viii + 184. 120 Illustrations. Reviewed by A. H[EISENBERG] (*Byz. Z.*, XXVI, 1926, 163-4; brief notice, and G. ZERETELI (*Gnomon*, II, 1926, 482-90).

SCHIAPARELLI's *Documenti Romani* (see *Journal*, x, 168, has been reviewed by P. M. MEYER (*Z. vergl. Rechtsw.*, LI, 1925, 286-7).

D. BASSI gives an account of the Latin papyri found at Herculaneum, inviting other scholars to examine them "e a vedere se è possibile cavarne qualcosa di più." It is good news that the veto previously imposed on foreigners as regards these papyri is now removed. *I Papiri Ercolanesi Latini*, in *Aegyptus*, VII (1926), 203-14. In another article BASSI gives a photograph of two rolls which still have the wooden cylinder in the middle. *Papiri Ercolanesi col cilindretto*, *ibid.*, 220-2.

A. KÖRTE shows from P. Berl. 13045 (the Demades dialogue) that OHLY (see the article referred to in *Journal*, XI, 104), with whose arguments in general he agrees, was wrong in generalizing them; sometimes not the normal but the actual lines were numbered. *Zur antiken Stöchiometrie*, in *Hermes*, LX (1925), 259-60.

A. MENTZ has published an elaborate study of Greek tachygraphy, with tables of signs, which should be extremely useful and mark a real step forward in this difficult subject. *Die hellenistische Tachygraphie*, in *Archiv*, VIII, 34-59.

W. N. STEARNS has read a paper on the protocol in P. Oxy. XVI, Pl. iii. A note of it, but without indication of contents, is given in *Proc. Am. Phil. Ass.*, LV (1924), XXXII.

G. KARO reviews KUHN's *Schreibgerät* (*Or. Lat.-Z.*, XXVIII, 1925, 69).

J. HASEBROEK, as an addendum to his *Signalement*, calls attention to Suet., *Aug.* 65, 3, which shows (1) that the practice of giving such descriptions existed outside of Egypt, (2) that a regular scheme of arrangement was followed. *Zum antiken Signalement*, in *Hermes*, LX (1925), 369-71.

EXLER's *Form of the Ancient Greek Letter* has been reviewed by C. CESSI (*Boll. Fil. Cl.*, XXXI, 1924, 65-6; favourable), H. A. HAMILTON (*Class. Phil.*, XXI, 1926, 183-4), and J. SIMON (*Anal. Boll.*, XLIII, 1925, 415-16).

S. LEXICOGRAPHY AND GRAMMAR.

Papyrologists, even more perhaps than other Greek scholars, will welcome the long-expected new edition of "Liddell and Scott," edited by H. STUART JONES with the assistance of R. MACKENZIE. The eighth edition of the famous work had long been out of date; almost every new collection of papyri or inscriptions brings its quota of new words or old words used in new connexions, and indeed the old lexica are really of little use for the student of papyri. The new edition, to which many scholars contribute material, makes full use of documentary papyri and inscriptions, besides the newly-discovered literary texts, and is further enriched by a systematic exploitation of literary works already known but not fully utilized in the earlier editions. By a drastic process of compression, particularly in the form of the references, it has been possible both to include the new words and senses and to augment considerably the number of references, without substantially increasing the number of pages. The work is being issued, unlike previous editions, in parts, of which two have already appeared. *A Greek-English Lexicon*. Oxford, Clarendon Press, Part 1: Α—ἀποβαίνω, 1925; Part 2: ἀποβάλλω—διαλέγω, 1926.

Part VI of MOUTON and MILLIGAN's vocabulary has appeared, bringing the work down to ῥώννυμι

(pp. 473-566). *The Vocabulary of the Greek Testament*. London, Hodder and Stoughton, 1926. 10s. 6d. net. A review will follow.

A reference may also be made to the second edition, by W. BAUER, of PREUSCHEN's *Griechisch-Deutsches Wörterbuch zu den Schriften des Neuen Testaments*. Five parts have so far appeared, reaching κατάγω. Giessen, A. Töpelmann, 1925-6. vii pp. + 640 col. Reviewed by A. DEISSMANN (*D. Lit.-Z.*, N.F., II, 1925, 1105-9; high praise; PREUSCHEN's work was very unsatisfactory, both in plan and execution, but BAUER has completely remodelled it and his work is excellent: one or two small points criticized).

The late FR. PREISIGKE's *Wörterbuch*, seen through the press by E. KIESSLING, is proceeding rapidly. Part 3, ending Vol. I, and Parts 1 and 2 of Vol. II, bringing down the work to σύννοια, have appeared during the period under review. A portrait of the lamented author is appended to Part 1 of Vol. II. *Wörterbuch der griechischen Papyrusurkunden* u.s.w. Berlin, Selbstverlag der Erben, 1925-6. (To be obtained from Fräulein GRETE PREISIGKE, Grobzig in Anhalt.) Reviewed by WILCKEN (*D. Lit.-Z.*, N.F., II, 1925, 1353-9; first two parts; high praise; approves plan, and defends the work against criticisms), SCHUBART (*Or. Lit.-Z.*, XXVIII, 1925, 17-19; Vol. I), CRONERT (*Gnomon*, I, 1925, 289-94; Vol. I: "Der Grundgedanke vortrefflich, der Arbeitsplan nicht genügend, die nach dem gewählten Plane vorgenommene Ausarbeitung fast ganz zuverlässig und ziemlich erschöpfend, der schnelle, saubere Druck lobenswert, Beseitigung der mancherlei, besonders sprachlichen Mängel durch einen Ergänzungsband dringend erwünscht, das Werk schon jetzt ein notwendiges Rüstzeug für den Philologen"; an important review, with many suggestions in detail), FR. BILABEL (*Phil. Woch.*, XLVI, 1926, 603-6; Parts 2 and 3), and F. ZORELL (*Biblica*, VI, 1925, 482-5; Parts 1 and 2; critical but appreciative).

PREISIGKE's *Namenbuch* is reviewed by WILCKEN (*D. Lit.-Z.*, N.F., II, 1925, 253-8).

I know only from a review by K. F. W. SCHMIDT (*Phil. Woch.*, XLV, 1925, 326) a doctoral dissertation by B. MEINERSMANN entitled *De papyrorum vocabulis latinis graeco transcriptis eorumque rationibus grammaticis. Deutscher Auszug*. Munsterer Doktordissertation, 1924. Pp. 8.

In letter xxviii to CALDERINI (*Aegyptus*, VI, 36-8) G. LUMBROSO discusses ancient glossaries and manuals of conversation for strangers not conversant with foreign languages, enumerating four such known to him. I may here refer to the Greek-Coptic glossary of Dioscorus mentioned in § 3 above, and to LUMBROSO's Alexandrian glossary mentioned in § 4.

B. OLSSON, whose valuable collection of private letters I mentioned in § 3, has been doing useful work also on various linguistic points. In one article he collects examples of substantives in -τρον, the result being to confirm, with a high degree of probability, the meaning "'Lohn' oder 'Kosten' für etwas" already suggested by the present writer (*Aegyptus*, II, 284). *Die Substantiva auf -τρον in den Papyri*, in *Aegyptus*, VI (1925), 289-93. In another he calls attention to a Latin graffito which contains ΟΧΙΑΝΕ, apparently in the sense "hurrah," "bravo," found in several papyrus texts. He does not doubt that Ὁκεανέ or Ὁκειαναι is vocative of Ὁκεανός. ΟΚΕΑΝΕ, in *Aegyptus*, VI, 295-6. In a third he collects instances of trade-names in -ās (all are of the Roman or Byzantine period). *Die Gewerbenamen auf -ās in den Papyri*, in *Aegyptus*, VI, 247-9. In a fourth he deals with the following words: —περιάγειν (P. Edgar 33; ησει (P. Lond. III, 1170 verso; =ἡσι=ἡσαν); τῇ πῖνα ἀγχόμεθα (P. Lond. v, 1674, 21, correcting an error in PREISIGKE's *Wörterbuch*); μελλοκούρια (P. Oxy. XII, 1484); αρμοκ(), οεντικ(), φαρακρ() (B.G.U. I, 344). *Sprachliche Bemerkungen zu einigen Papyrusstellen*, in *Aegyptus*, VII (1926), 108-12. Finally, in another he explains the λεία in Hesych. 4, 284, s.v. χήμη by P. Edgar 15, 7; βωτίον (Hesych. 4, 7) as = βωσίον, *P. Stud. Pal.*, XX, 67, 35 (βωσιδια, S.B. 1160-4, from the same); ἀλλαξιμάριον (Du Cange), cf. *P. Stud. Pal.*, XX, 245, 25, ἀλαξιμάρια δ, "Wechselskleid"; so too P. Cairo Masp. 67006 verso, 66, ἀλαξιμάριον. *Drei Glossen*, in *Symbolae Osloenses*, IV (1926), 62-3.

P. KRETSCHMER, seeking to determine the earliest date at which the modern meaning "bread" can be traced for ψωμίον, and quoting papyri, fixes "circa 400" as the *terminus a quo*. [But he is wrong; cf. P. Lond. 1914, 49, 52 (*Jews and Christians in Egypt*, p. 60), where the meaning is clear.] *Brot und Wein im Neugriechischen*, in *Glotta*, XV (1926), 60-5.

H. WIESMANN publishes a note on ἄ-μεταποια (= *Corporis et capitis inclinationes*, as in Du Cange) in *Zeitschr. f. ag. Spr.*, LXII (1926), 68.

LUMBROSO in letter 73 to WILCKEN (*Archiv*, VIII, 73) discusses the common expression σωθεῖς or διασωθεῖς ἐκ μεγάλων κινδύνων, which he thinks was a stock phrase used particularly of peril by sea.

G. FLORE discusses the meaning of μετεπιγραφή with reference to P.S.I. 906. *Nota a P.S.I. 906*, in *Aegyptus*, VII (1926), 271-4.

W. SPIEGELBERG in his *Ägyptologische Mitteilungen* (see § 4 above) devotes § II to the subject *Zu den*

griechischen Übersetzungen ägyptischer Eigennamen, showing that in double names one is often a translation of the other. He gives interesting examples. In another article, on the identification of the dead with the hawk, he deals with Greek names with the prefix *Παχου-*, which belong to this class, even when applied to living persons. This use was either proleptic or perhaps due to the fact that the persons so called were mystae of some hawk-god. *Die Falkenbezeichnung des Verstorbenen in der Spätzeit*, in *Zeitschr. f. äg. Spr.*, LXII (1926), 27-34.

H. P. BLOK discusses the Greek loan-words in Coptic. *Die griechischen Lehnwörter im Koptischen*, in *Zeitschr. f. äg. Spr.*, LXII, 49-60.

K. SETHE points out that the Egyptian *h* at the beginning of words should not be written in transcriptions of the Greek forms of such words. *Zur Wiedergabe des ägyptischen h am Wortanfang durch die Griechen*, in *G.U.N.*, 1925, 50-6.

E. MAYSER has at last published a continuation (not yet accessible to me) of his invaluable grammar of Ptolemaic papyri. *Grammatik der griechischen Papyri aus der Ptolemäerzeit, mit Einschluss der gleichzeitigen Ostraka und der in Ägypten verfassten Inschriften*, Band 2: *Satzlehre. Analytischer Teil*, Hälfte 1. Pp. xx + 390. Berlin, Walter de Gruyter, 1926. Mk. 45. Reviewed by D. C. HESSELIUS (*Museum*, Leiden, xxxiii, 1925-6, 256-8).

In *Proc. Am. Phil. Ass.*, LV (1924), xxix is given an abstract of a paper by R. C. HORN entitled *Textual and Grammatical Comments on Certain Papyri*.

B. OLSSON shows that the nominative was often used instead of the accusative to indicate time in the N.T. and LXX. He quotes papyrus examples. *Nominativ bei Zeitbestimmung in den Papyri*, in *Aegyptus*, VI (1925), 294.

G. GHEDINI has undertaken a useful piece of work in a study of the language of Marcus Aurelius, which illustrates and is illustrated by the papyri. *La lingua greca di Marco Aurelio Antonino*. Parte Prima: *Fonetica e Morfologia*. (Pubbl. d. Univ. Catt. del Sacro Cuore, S. IV, Vol. V.) Milano, "Vita e Pensiero," [1926]. Pp. xv + 90.

9. GENERAL WORKS, BIBLIOGRAPHY, MISCELLANEOUS NOTES ON PAPYRUS TEXTS.

W. L. WESTERMANN publishes an interesting and suggestive popular review of papyri regarded as historical material. *The Greek Papyri as Historical Material*, in *Class. Weekly*, XIX (1925), 51-5, 59-62.

M. HOMBERT has published his inaugural lecture of the Doctorat en Philologie classique on 27 Oct. 1925, in which he gives an account of the history and scope of papyrology. *La Papyrologie grecque*, in *Rev. de l'Univ. de Bruxelles*, xxxi (1925-6), 168-89.

K. KALBFLEISCH publishes a popular lecture given at the 150th anniversary of the *Wormser Zeitung* on 7 Feb. 1926, in which he deals with the human aspect of papyri. Three of the P. Iand. are given in facsimile. *Griechische Familienpapiere aus Ägypten*. Worms, E. Kranzbühler Gebr. Cuyrim [1926]. Pp. 9. 2 Plates.

J. A. NAIRN publishes a popular account of life as revealed by the papyri. It is an interesting paper, but not always up to date in the texts used, and it does not take sufficient account of the differences between the Greek and the Egyptian parts of the population. *Illustrations, from Papyri, of the Manners and Customs of Graeco-Roman Egypt*, in *Trans. Roy. Soc. Lit.*, xxx. Pp. 23.

The last edition of DEISSMANN'S *Licht vom Osten* is reviewed by J. BEHN (*Or. Lit.-Z.*, xxvi, 1923, 577-8) and E. SCHWARTZ (*Byz. Z.*, xxv, 1925, 154-6; unfriendly; points out various misconceptions).

SCHUBART'S *Jahrtausend* is reviewed, along with his *Ägypten*, by W. OTTO (*Phil. Woch.*, xlv, 1925, 328-31). His *Papyruskunde* (in Gercke and Norden) is reviewed by E. KUHN (*Or. Lit.-Z.*, xxix, 1926, 113; high praise).

J. G. MACHEN reviews MEECHAM'S *Light from Ancient Letters* (*Princeton Theol. Rev.*, xxiii, 1925, 675).

There have been many references in this bibliography to the *Raccolta Lombroso*. The full reference to this valuable collection of articles, largely papyrological, seems appropriately to fall under this section: *Raccolta di scritti in onore di Giacomo Lombroso (1844-1925)*. Pubbl. di "Aegyptus," S. Scientifica: Vol. III. Milano, 1925. Pp. xlvii + 538. Reviewed by V. ARANGIO-RUIZ (*Aegyptus*, vii, 1926, 154-62).

P. M. MEYER reviews *Aegyptus*, III-v, with notes on other publications, in *Z. vergl. Rechtsw.*, LI (1925), 282-5. Reference may here be made to three useful bibliographies: the admirable *Bulletin Papyrologique* of S. DE RICCI (*Rev. ét. gr.*, xxxvii, 1924, 83-113), HUNT'S in *The Year's Work in Classical Studies*, 1923-4, 67-76, and that in the *Byz. Z.*, xlv, 403-512.

W. CRÖNERT makes valuable contributions to the text and interpretation of the following papyri:—WILCKEN, *Chrest.* 1; *Chrest.* 491; the "Curse of Artemisia"; letters 2, 7, 8, 10-16, 19, 21, 22, 24 in DEISSMANN's *Licht vom Osten*. He is always acute and writes from a vast fund of learning, but is perhaps too ready to fill in lacunae, for experience has shown that even the greatest acuteness and the widest learning can rarely be trusted to restore accurately a text which is very imperfect unless fairly close parallels are available. *De critici arte in papyris exercenda*, in *Raccolta Lumbroso*, 439-534.

G. VITELLI issues some corrections to various papyri in the series P.S.I. *Noterelle papirologiche*, in *Aegyptus*, VII (1926), 269-70.

Reference may be made here to R. C. HORN's paper noted in § 8.

H. GERSTINGER, stating that IBSCHER has worked on various papyri at Vienna, cleaning and piecing together fragments, communicates a number of new readings which he and (for the "Töpferorakel") L. RADERMACHER have obtained in consequence. *Aus der Wiener Papyrussammlung*, in *Wiener Studien*, XLIV (1924-5), 218-20.

With the help of B.G.U. VI, 1270, D. COHEN neatly supplies some lacunae in P. Tebt. I, 106, in *Mnemosyne*, LIV (1926), 81-2.

M. BESNIER calls attention to the Latin document of sale, P.S.I. 729, and makes various comments on it (currency, the Roman corps mentioned, questions of citizenship. *Note sur le n° 729 des Papiiri della Società Italiana*, in *C.-R. Inser. et B.-L.*, 1925, 124-8.

H. HENNE gives reason to date P.S.I. 33 in the autumn of either 150 or 173 A.D. *Note sur la date de P.S.I. 33=P. Coire 40, 447*, in *Aegyptus*, VII (1926), 275-6.

LUMBROSO in letter 72 to WILCKEN (*Archiv*, VIII, 60-2) suggests that in P. Grenf. II, 73, "citizen" being an honourable title, *πολιτικὴ* may be a descriptive epithet, not a name.

J. MUSSEHL, in a note on P. Oxy. III, 471, makes two attractive suggestions for readings. *Zu Pap. Oxy. III, 471*, in *Hermes*, LXI (1926), 111-12.

W. SPIEGELBERG points out that *βαυεφωθ* = *ⲙⲉⲩⲁⲓ*, which occurs in the Greek-Coptic glossary of Dioscorus (see above, § 3), is explained by a passage in Epiphanius, which shows that *νεφωθ* was an Egyptian word for *κροκόδειλος*. *βα* = *bt*, "soul." This is the god Nephotes mentioned in S.-B. 23, = "Nil-Zeus mit Beinamen Nephotes" [but would not this be expressed by *τοῦ καλουμένου* or *τοῦ καὶ κ.*?]. *κυβερνήτης Νείλου* in that text is a priest. *Der Gott Nephotes Nfr-ḥtp, und der κυβερνήτης des Nils*, in *Zeitschr. f. äg. Spr.*, LXII (1926), 35-7.

10. MISCELLANEOUS AND PERSONAL.

A. E. R. BOK gives an account of the first season's results in the University of Michigan's excavations at Kôm Washm (Karanis). *The University of Michigan's Excavations at Karanis: 1924-5*, in *Journal*, XII (1926), 19-21. Plate ix (air photograph). I may mention that last season, though less productive than the first, yielded some valuable "finds," and that the present one is still more successful. Valuable, however, as some of the objects found (not merely papyri, but glass, pottery, textiles, basket-work, etc.) may be, the main importance of the dig lies in the fact that for the first time a purely Graeco-Roman town is being scientifically and thoroughly excavated, not merely for the sake of the papyri which may be found there, but for its own sake, in order to plan its streets and houses and to obtain an idea of the life lived in it.

H. HENNE gives an account of the excavations of the Institut français d'Archéologie orientale at Tell Edfu in the seasons 1921-2, 1923, 1924. At present only the Muslim town has been touched. Some good finds have been made: an Arabic book, two big Arabic contracts on gazelle's skin, besides fragments, Coptic papyri, Greek, Coptic and Arabic ostraca, etc. *Tell Edfu*, in *Aegyptus*, VI (1925), 285-8.

W. SCHUBART gives his impressions on a recent visit to Egypt and Palestine, with some remarks on the state of the papyrus market. *Aus Ägypten und Palästina*, in *Gnomon*, II (1926), 61-3.

Our science has suffered heavy losses during the period under review. GRENFELL, LUMBROSO, PARTSCH and JORS are names familiar to all who are interested in papyri; E. COSTA was first and foremost a Roman jurist, but he had done valuable work also on papyrus texts.

GRENFELL's break-down in health had for some years removed him from the ranks of active workers in the field, but hopes had been entertained that he might yet recover and return to the studies which he had so much at heart, and the news of his death came as a shock to all. To those privileged to know him it was doubly grievous; a singularly attractive personality, a loyal friend, a generous and magnanimous soul has been taken from them. An obituary notice by J. G. MILNE has appeared in this *Journal*, and another, by WILCKEN, has been published in *Gnomon*, II (1926), 557-60.

LUMBROSO died shortly before the appearance of the *Festschrift* designed to celebrate his eightieth birthday. In the nature of things he could not long have continued his labours, but up till his last illness his hand had lost none of its cunning, and the stimulating and suggestive letters, full of curious learning and of a surprising freshness, which he contributed to the *Archiv* and other periodicals, will be sorely missed. The *Raccolta* which bears his name contains an obituary with a bibliography and a portrait (pp. xi-xviii, obituary by CALDERINI, xix-xlvi, bibliography by A. LUMBROSO). Notices of him have been published also by E. BRECCIA (*Bull. Soc. Arch. d'Alex.*, No. 21, 86-91; portrait) and W. SCHUBART (*Gnomon*, I, 1925, 54).


PARTSCH and JÖRS had both done work of great importance on the juristic side of papyrology. The former in particular had for years devoted his penetrating intellect with enthusiasm to the elucidation of the many legal problems offered alike by the Greek and the Demotic papyri, and a whole series of masterly studies remains to be a memorial of his activities. Obituaries of him have been published by P. DE FRANCISCI (*Aegyptus*, v, 1924, 333-6) and O. LENEL (*Z. Sav.-St.*, xlv, 1925, v-xx); of JÖRS by E. SCHÖNBAUER (*ibid.*, xlvi, 1926, vii-xiii). A. ALBERTONI publishes an obituary, with bibliography, of E. COSTA (*Aegyptus*, vii, 1926, 285-94).

NOTICES OF RECENT PUBLICATIONS

Études de nautique égyptienne. L'art de la navigation en Égypte jusqu'à la fin de l'ancien empire. Par CHARLES BOREUX. Mém. de l'Inst. Franç. d'Arch. Orient. du Caire. Tome cinquantième. Le Caire : premier fascicule 1924, deuxième fasc. 1925. Pp. vii + 569.

The need of a classical work on Egyptian ships and navigation has long been felt. As M. Boreux says in his preface, Reisner's *Models of Ships and Boats* and Assmann's study of the representations of ships from the monuments of Sahurê deal—not always in accordance with his views, but conscientiously—with small areas of a large field. Graser, who attempted to take in as much as was visible in *Das Seewesen der alten Ägypter*, wrote nearly sixty years ago. Hitherto Reisner's book has been by far the most useful, even for the general character of Egyptian ships. But when we are told that the two volumes under review are only the first part of a complete study of the subject, we may reasonably expect to find the *Models of Ships and Boats* relegated completely to the position of the catalogue which it was originally intended to be. The tragedy of a monumental work such as M. Boreux's is, that to be what it is, it must take in so much material, to a great extent of a technical nature, that it assumes too much the character of a reference book, in which the wood cannot be seen for the trees; hence the work is never read as a whole, though its presence for consultation is necessary to every student. Here perhaps the reviewer can be of service to the student (as well as to the author), by saying emphatically that M. Boreux's book does not deserve such a fate.

The whole of the first volume, with the exception of a few pages, reads without a suspicion of the catalogue, and although there are over a hundred pages in the second confined to the discussion of technical details of the parts of the ship, the main thesis of the book is kept steadily in view till its summary at the finish. (One may add that the separate publication of the volumes with a year's interval between them is misleading to this extent, that *fasc. 1* is useless without its fellow. Indeed they divide a sentence, and the preface—by this and other tokens—written after the whole work was finished and ready to print—is found at the beginning of *fasc. 2*.)

It must be admitted that the interest and importance of M. Boreux's *Études de nautique égyptienne* for Egyptologists lie largely in the fact that he is not concerned only with nautical matters. From this starting point he has adventured into long excursions in the field of religion, *e.g.* his very important study of the feast , and on a larger scale, his exposition of the preservation of the *horien* type of boat in religious affairs as a reminder of the early victories of the god and his followers in ships of that type. But it is his own valuation of the material as primarily *historical* evidence that sustains our interest. His thesis, as we shall see, is as important for the light it throws on the early history of Egypt as for its maintenance of a logical evolution of the Egyptian ship.

The two principal races which, added to the indigenous African inhabitants, went to the making of historic Egypt appear to have possessed essentially different types of boats, each of which predominated according as the one or the other people was successful in the prehistoric period. The first to arrive was that race one of whose most characteristic cultural features was the buff pottery with designs in red frequently bearing representations of boats of a certain fixed type. This type, from its common occurrence at Nakâdah is called by Boreux *naqadien*. It was made of reeds or light wood, and from certain details, notably the branch in the prow, is shown to have come from the east; but so anciently, that for practical purposes it must be considered indigenous. As such it characterizes the whole of the prehistoric period proper. The second invasion also comes from the east, but not from so far afield as the first. M. Boreux has no difficulty in identifying its source as Mesopotamia, and its route with that suggested by Frankfort, on other evidence, namely the Persian Gulf and the Red Sea. (As both these authors' "Studies" appeared at the same time, neither could make use of the other's evidence.) The principal god of this new race was the falcon which gives Boreux *horien* as his term for the second main type of Egyptian ship. It is known to us from comparatively few examples from Egypt, the most familiar of which are the "foreign" boats in the Hierakonpolis paintings, and the well-known representations on the Gebel el-'Arak knife. The boats were made of wood, and were decked and keeled. From the moment of their arrival—towards

the end of the prehistoric age, in what Boreux calls the predynastic—the *horien* people had to struggle with the, by now almost indigenous, *naqadien* and *sethien* civilizations which it found in south and north respectively; the representations of the boats reflect this struggle. In spite however of the *horien* conquest, the *naqadien* hull, so much more fitting to the nature of the river and marshes, rapidly predominated, till, by the beginning of the Old Kingdom, it had supplanted its rival in all kinds of vessel except certain religious boats which kept up the ancient ritual of the race. The curious fact that the *Sethiens*, themselves probably of the same stock in Asia as the *Horiens*, should be using the *naqadien* type of boat, is probably accounted for by M. Boreux's suggestion that as they came into Egypt by the land route—over the Isthmus of Suez—they had no ships of their own with which to oppose the *Naqadiens* when they arrived, and were therefore ready enough to take those over. But in any case their arrival seems to have been by way of infiltration rather than invasion, and they would thus be less likely to force such an important cultural element as a new method of navigation into the place of an already successful one. But while the *naqadien* hull prevailed for all civil purposes the conquering *Horiens* retained their own rigging, and the ordinary boat thus assumed a composite form, which was stereotyped in the hieroglyph of the boat found in the Pyramid Texts.

So far the evolution of the ship, illustrating the history of the land, is tolerably clear. But with the Memphite Dynasties it is seriously confused by the displacement of the *horien* rigging in the north, and the appearance of an essentially different mast and sail whose form resembles that of certain Far-Eastern ships. M. Boreux is not prepared to press this resemblance so closely as he is in the case of the *naqadien* vessels—the similarities are, of course, between different things in the two cases, or the problem would be much simpler—and his frank inability to explain, or account for, this divergence is the one weak spot in his argument. It remains inexplicable, and we can only state that the type must have been in existence in the Delta—whatever its origin—for a considerable time to have been of sufficient importance to compel the *Horiens* to assimilate it into their culture. It is clear however that in spite of the unification of Egypt under Memphite rule the type of vessel used was not the same throughout the land, for the *Horiens* of the south retained their native ship—i.e. *horien* rigging and *naqadien* hull. More important still, whenever we find the southern tribes pushing up into the north, e.g. at the end of the Sixth Dynasty and at the beginning of the Middle Kingdom, we find also the *horien* type of boat reappearing in the north. Indeed the vessel with Far-Eastern masts begins to lose ground in the First Intermediate Period, and later disappears for good, its place being taken by the Theban boats of *horien* type, which from the beginning of the New Kingdom became general throughout the country.

Thus if we put on one side the *mât-chèvre* and its peculiar sail, the evolution of the Egyptian ship is a steady logical progression, drawing its improvements from the genius of the country, and owing nothing to Mediterranean influences until the great increase of relations with foreign peoples—notably the Phoenicians—in the fulness of the New Kingdom.

Such is the outline of the historical theme of M. Boreux's book. In detail it is full of suggestions, which, as they are no more than that, hardly come into the main theme. Historically the most interesting period is the earliest: the difficulty is to discover how far we may consider the first invaders indigenous. On this point I am not certain that M. Boreux is himself quite clear as to his view. The earliest invaders, coming from a Far-Eastern country, used for that journey ships of wood—at any rate of larger proportions and stronger material than the raft-like boats to which the name is given when they arrived in Egypt. This he admits. Moreover, he says that their *naqadien* type of boat was so naturally adapted to the peculiarities of river-life in prehistoric Egypt that it could not but have been continued in use there. But elsewhere he seems to suggest that the indigenous boat was so obviously the right boat for the conditions, that the invaders automatically adapted their boat to its character. But in that case, why call the boat actually used in Egypt *naqadien*?

The paucity of remains for the study of early sea-going vessels must account for the comparatively small space given to that side of Egyptian navigation. The main conclusion in regard to the boats is that in general they resemble the river-boats, the differences being chiefly in incidental details, due to the unusual size of the sea-faring ship; with one important constructional variation, namely the use of a thick rope fastened from nose to stern passing over a crutch in the centre of the hull, which thus afforded a safeguard against the possibility of the boat breaking her back on a reef, or in heavy seas. A precisely similar rope was used in the building of papyriform river-boats, in order to bend the wood into shape, and to hold it so while work was in progress on the hull. But in this case the purpose ended with the completion of the boat.

By the exhaustiveness of his references, the number of years that he has devoted to this particular study, and his obvious familiarity with its technical details M. Boreux puts himself almost beyond the reach of criticism. One does not, however, require a special knowledge of nautical matters to have stronger doubts than his as to the nature of the instrument in the hand of the man in Fig. 171, p. 408. It is surely inconceivable that a man should point a megaphone in the opposite direction to that in which he is trying to make himself heard! Again, in speaking of what he calls *bouées-tampons* Boreux rightly distinguishes the anchor weight hanging from the stern and the other wooden object tied to a shorter rope which hangs from the bows, both of which Reisner called "bumpers" or "buffers." When making notes on the model boats in the British Museum I had considered the objects in the stern to be bumpers and those in the bows to be mooring-buoys. The evidence from the earliest times onwards brought forward by M. Boreux shows that the former must be anchors; but the term *bouées-tampons* seems to be confusing, if not incorrect for the latter. The word *bouée*—as far as I can discover—always means buoy, and *bouée-tampon*, buoy-fender, is a mixture of terms which conveys an impracticable idea. It is clear however that M. Boreux considers these objects to have been used as fenders pure and simple. Yet their form, examples of which he gives in Figs. 177 and 179, certainly suggests that they are made of wood "recouvert ou non de peau," rather than the alternative—"des outres de toile ou de sparterie, qu'on bourrait de fibre végétale ou de toute autre matière." This and their conical tops (reminiscent of our own buoys) and evident attempt at clear markings, are strong arguments, to my mind, for seeing in these objects buoys for mooring purposes, rather than fenders.

M. Boreux has taken full advantage of the generous methods of the Institut Français, and has provided the largest possible number of indices, including an elaborate cross-reference index to important notes. The list of *errata* is apt to be overlooked at the end, and would have been better placed at the beginning of the book. The author would not then run the risk of being misjudged. Both volumes are very fully illustrated, chiefly with excellent line drawings by Mlle Jeanne Evrard. But the very much smaller number of photographs are not so successful; Fig. 2 is a good example of how poorly they are reproduced. They take away very little, however, from an invaluable work.

S. R. K. GLANVILLE.

Juden und Griechen im Römischen Alexandria. Von H. I. BELL. Leipzig: J. C. Hinrichs. 1925. Pp. 52. 2 plates.

The quarrels between Greeks and Jews at Alexandria have taken up a substantial proportion of the recent literature dealing with Graeco-Roman Egypt, not without reason, as they throw much light on the life and character of the city: and as we have partisan statements from both sides at various periods, some of them only fragmentary, as well as one important pronouncement of an Emperor, it affords an interesting subject for study to piece together the bits of information and form an estimate of the merits of the controversy.

The first two chapters of this pamphlet give an excellent summary of the history of the Jews in Egypt under the Ptolemaic dynasty and their standing as an organized community, to which there is little to add: it might however be suggested that more stress should be laid on the relation between the growth of Alexandria as a trading centre and the increase in the importance of the Jewish colony in this period.

Mr. Bell then reaches his main theme, and describes fully what is known of the struggle which continued for a century, from the reign of Caligula to that of Hadrian, between the Greeks and Jews, with specially violent outbursts from time to time which led to action by the central government at Rome. He rightly connects the antisemitism of this period with the anger of the Greeks at finding themselves deprived of their privileged position in Egypt, while there had been no derogation from the standing of the Jews: the situation might be summed up briefly by saying that the Greeks, not daring to attack the Romans directly, vented their spleen on the Jews, whom they regarded as favourites of the Romans. His account of the tangled web of intrigue that is partially revealed by the documents that have been preserved is admirably judicious.

After the reign of Hadrian the Jews appear but seldom in the records of events in Egypt till the great outbreak of rioting under the auspices of the patriarch Cyril at the beginning of the fifth century, with which Mr. Bell closes his story: and here it may be questioned whether his interpretation is quite adequate. Cyril had assumed the place of the gymnasiarchs of the first century, as leader of the anti-Roman party in Alexandria, and followed the example of his predecessors by attacking the Government through the Jews: but, while his massacres and confiscations may have been more extensive than theirs,

and the civil and military authorities were certainly much less able to control the situation, it seems to be ascribing too much to his credit or discredit to suggest that he accomplished the extermination of the Jews which the Greeks of the first century had failed to do. The Jewish colony had revived repeatedly after the persecutions of the former period, and would probably have revived again in the fifth century, if it had been worth the while of the Jews to remain at Alexandria: but the importance of the city as a commercial centre had been waning for some time, and when Cyril had spent his force there was nothing to attract the Jewish traders back. Similar instances of the disappearance of a Jewish colony concurrently with the decay of mercantile prosperity can be found elsewhere: this review is written where a flourishing community of Jews existed under the Angevin kings; but, as the grip of the University throttled the local trade of the city of Oxford, the Jews just vanished.

It may be noted that Mr. Bell's pamphlet adds to its merits of scholarship and judgment that of being readable.

J. G. MILNE.

Kulturgeschichte des Altertums: ein Überblick über neue Erscheinungen. Von WALTER OTTO. München: C. H. Beck. 1925. Pp. x+175.

It is necessary to add the sub-title of this work, or its nature and scope might easily be misconceived. The author explains in his preface that it grew out of a series of reviews, which he thought it advisable to use as the occasion for a summary review of the development of ancient culture as illustrated by various recent works. Yet the result is far more than a mere review or bibliographical survey. The volume contains a brilliant and readable, if necessarily rapid, sketch of the course of civilization in what is now called the Nearer East and the Mediterranean lands from the dawn of history to the collapse of the Roman Empire. Beginning with a general introduction, in which he discusses the conception of ancient history (which he regards as ending at about the reign of Justinian) and of "Kulturgeschichte," the author proceeds to trace in chronological order the various cultural spheres and periods, with constant reference to recent works bearing on the single problems referred to.

To have ranged over so wide a field and to have compressed so huge a mass of material into a work of this size is in itself an amazing achievement; and Professor Otto has moreover produced a volume which is throughout stimulating and full of interest, and which contains very many acute and some illuminating remarks. A certain over-definiteness—I had almost said cocksureness—of statement on subjects still under discussion was perhaps inevitable in a summary review, but naturally the author's statements will not always pass without challenge, and the authority which his opinions can claim must vary, since no one man can be an expert on so many subjects as are here dealt with. Probably several scholars would question his placing of Greeks in the Mycenaean period, for example; and his treatment of Rome, which he regards too much as a mere department of Hellenism, is not wholly satisfactory. His views on Roman art (p. 124) are likely to provoke vigorous dissent; and, despite his arguments to the contrary, I still think it better to end the Hellenistic period not later than the end of the Roman republic. Otto probably over-estimates the unity of "Hellenismus."

Despite some disputable and one-sided statements, however, the book is an extremely valuable contribution to the literature of the subject, which students cannot afford to neglect. Interestingly written, it nevertheless suffers a little from the author's fondness for long and rather involved sentences. It is, by the way, a little curious that he says nothing of Malta, where remarkable remains of prehistoric culture have been discovered in recent years.

H. I. BELL.

The Monastery of Epiphanius at Thebes. Part I, *The Archaeological Material*, by H. E. WINLOCK; *The Literary Material*, by W. E. CRUM; Part II, *Coptic Ostraca and Papyri, Edited with Translations and Commentaries*, by W. E. CRUM; *Greek Ostraca and Papyri, Edited with Translations and Commentaries*, by H. G. EVELYN WHITE. 2 Vols. in fol. New York. 1926. xxvi+276 pp. and 35 plates; xvi+386 pp. and 17 plates.

Those who for many years past have made a study of western monasticism must be filled with admiration—tinged perhaps with jealousy—when they see the increasing excellence and sumptuousness of the successive volumes devoted of late years to Egyptian monasticism. After Bawit, Saqqarah and Dêr el-Abyad we now have a fresh field, the Monastery of Epiphanius, and by comparing these works one is able to obtain some idea of the precision with which they depict the history and customs, in a word the monastic community and its civilization.

Undoubtedly the sand has constituted itself the ally of archaeology in the preservation of many objects of no money value, but nevertheless of exceptional interest for what they reveal to us of the daily life of the people. It is in particular the sand of the Egyptian desert which has rendered us this service; the sand of Africa has scarcely preserved anything except the monastery of Tebessa, while as for our own countries in Europe, the severe climate, fires, invasions and floods have succeeded in destroying all save the merest traces. The social, artistic and literary importance of St. Denis, Cluny, Mont Cassin, Bobbio, Saint-Gall, Iona and Lindisfarne is not to be compared with that of Egyptian monasteries whose names are scarcely known, and yet detailed monographs and magnificent albums prefer to treat of these humble houses which sheltered a community of monks for scarcely a century or two. We may rejoice at this when we think of the definitely dated facts which these investigations have established in the history of monasticism as it existed in the humbler establishments.

The New York Metropolitan Museum of Art has just published the archaeological results of the Egyptian Expedition of 1912 and 1914. The excavations of these years revealed several monasteries not far distant from each other situated west of Thebes, between the Valley of the Kings and the Valley of the Queens. The most important, or at least the most fully investigated of these monasteries forms the subject of the present publication.

The Christian town of Jême, on the site of which Medinat-Habu stands to-day, was situated to the west of Thebes and formed a civil settlement around which as a centre the monastic establishments lay scattered on the mountain. Hermits lived there in isolation at a date impossible to determine, as they have left no traces save a name, an initial, and occasionally a short prayer inscribed on the rock; one less penurious than the rest wrote in red.

Towards the sixth and seventh centuries the cenobite system was so firmly established in Egypt that the number of monasteries greatly increased. Though anchorites were not scarce, it seems that many took advantage of the mitigation of hardships afforded by life in communities. The monastic retreats in the neighbourhood of Thebes were intended to accommodate only small communities; their dimensions are restricted and their cemeteries small. Dêr er-Rûmi and Dêr el-Medinah were contemporary with the monastery of Epiphanius and never contained more than a few monks. These holy men lived modestly and economically, compelled to do their own work in turn as gardeners, cooks, masons and tailors; for the benefit of these last instructions as to the length and breadth of their garments had been traced on the walls.

Other monasteries must have differed but little from these; Dêr el-Bahârî, where a dozen graffiti have been discovered; Dêr Kurnat Murçay, of which nothing but ruins remains; the monastery of Cyriac, which was a community of hermits where fourteen letters on papyrus were found, six of which were addressed to Cyriac, and finally Dêr el-Bakhît.

The monastery of Epiphanius had left no memory in the native traditions; in the nineteenth century travellers and savants periodically recalled its existence to scholars; fortunately a will of the seventh century compiled by two monks, Jacob and Elias, has preserved for us some useful information regarding the site and history of the establishment. From this we gather that Epiphanius was not the first abbot, but probably outshone his predecessors by his talents or virtue, for his chamber was preserved and visited, many of the visitors having inscribed their names on the walls, together with an occasional prayer.

Those parts of the buildings which were excavated proved to be small in extent, the monks preferring solidity to magnificence. Two towers of unequal size provided some sort of habitation for the establishment; the larger of the two towers rose to three storeys. The site of the chapel has not yet been ascertained with any certainty. Some of the cells are outside the enclosure wall, doubtless because they were added at a later date. The monastery was provided with a subterranean cellar. Nile mud beaten and formed into bricks was employed by the mason-monks for the construction of two bread ovens. The community must have possessed some capable artisans. One of them had made a chest and wooden balusters, and a lock of sycamore wood; another had perhaps made the pavement consisting of a kind of parquet. Large covered jars on which had been drawn christs and palms were found in the cellar, where also some grains of barley, some beans, and even onion skins have survived to this day. Among the most interesting of the relics must be mentioned a well made instrument of wood shaped like a rigid flail, *norîg*, for threshing grain; it is made of acacia wood and measures 2·175 metres in length. There were also sieves, the earthen pots of a water-wheel for drawing water from the wells, jars and bowls. The monks also wove mats and made leather aprons; some of them could draw with a pen, and mention ought also to be made of broken glasses, spoons, a censer and a graduated ruler.

No person outside the monastic community could be buried in the cemetery, for its small dimensions made this impossible. Only eleven graves have been excavated: six of these were empty, three partially empty, while two contained the mummies of male adults of not more than forty years of age. In the centre of the cemetery a small mausoleum, the four corners of which still stand, was originally surmounted by a spherical dome about 3·40 metres in diameter.

One would like here to give a summary of the valuable chapter of 60 pages devoted to the monks and their customs, *Theban Hermits and their Life*, and mention should also be made of their literature, but as these texts fill a large folio volume, one can only add that this admirable work contains more than seven hundred texts published complete with translations. Among the Coptic liturgical texts are some prayers, a hymn, a homily of St. Athanasius (the Greek text of which is unknown), various extracts from Apa Shenoute, sermons, letters and homilies on papyrus and ostraca, contracts, receipts, wills, several hundreds of letters—the correspondence between Epiphanius and Pesenthius of Kūft. Mention must also be made of a very valuable list of books, medical prescriptions and aphorisms or transcriptions of students.

The arrangement of the matter is perfectly clear. A summary is given here: *Archaeological Material* (by H. E. Winlock). Introduction. I. The Topography of Western Thebes in the sixth and seventh centuries A.D. from the existing Christian ruins. II. The Monastery of Epiphanius, as shown by the excavations. III. Trades and occupations at the Monastery, as shown by the excavations. *Literary Material* (by W. E. Crum). IV. History and Chronology. V. Topography as recorded in the Texts. VI. Theban Hermits and their Life. VII. Writing Materials. VIII. Literature. IX. Epiphanius and Pesenthius. X. The Language of the Texts. List of Texts in Part II as cited in the present volume. *Indexes*: Names, Places, Coptic, Greek and Latin, Arabic. Subjects. Plates.

This summary gives a glimpse of the wealth of Volume II, which is chiefly the work of Mr. W. E. Crum, whose extensive and reliable knowledge has enabled him to give to each one of these fragments its full biblical, liturgical, administrative and philosophical value. From the hundreds of letters which he has had the learning to read and the patience to translate and annotate historians of Christian Egypt during Coptic times will obtain valuable information. From the point of view of asceticism and discipline one can only refer to a proportion of the letters taken at random; for example, No. 106, a promise of obedience to Epiphanius, which is, however, not a formal monastic declaration; a similar promise (No. 113), which is, perhaps, only a formula appearing to mean more than it really does. A demand for pardon (No. 114). A disciplinary measure taken against a deacon deprived of his office (No. 158). Apologies for employing an ostrakon in default of papyrus (Nos. 141, 172). In a general way, the tone of these correspondents is marked by a deference that is almost obsequious.

It is perhaps superfluous to add that this work, emanating from the Cambridge University Press, is presented in an irreproachable form. The print is clear, the marginal notes which accompany the text facilitate reading and reference, the illustrations are good and the measurements are given in the metric system. Altogether this monograph adds to our knowledge a group of monasteries which, though lacking in splendour, yet for this very reason give us an exact idea of a large number of the Egyptian monasteries of the seventh and eighth centuries of our era. Archaeology gains by this work, while as for learning and literature, each time that an archaeologist or a historian opens the book he will discover more than he ever thought to find.

H. LECLERCQ.

Handbook of the Egyptian Collection: Art Institute of Chicago. By THOMAS GEORGE ALLEN. Chicago. 1923.

The Art Institute of Chicago has produced a very acceptable *Handbook of the Egyptian Collection* of the Institute, by Mr. T. G. Allen, Secretary of the Institute and of the Haskell Oriental Museum, with the assistance of Dr. J. H. Breasted, Director of the Museum. The collection appears to be a large and representative one, and includes many objects of first-rate artistic and archaeological interest, belonging to all periods. The guide is well written, and is entirely up to date in its information. And the collection itself appears to be arranged in a most useful manner. The reader is taken in easy conversational manner through the whole gamut of a representative Egyptian collection, from coffins and their accessories through sculpture, pottery, minor arts, bronzes, metal-work, amulets, scarabs, and papyri to Graeco-Egyptian paintings. It is not a mere list, but is in itself quite a useful book on Egyptian antiquities, and it has a good index.

H. R. HALL.

The Monasteries of the Wadi 'n-Natrun. Part I. New Coptic Texts from the Monastery of Saint Macarius. New York. 1926. Pp. xlviii+299. 28 plates. By H. G. EVELYN WHITE. Appendix by G. Sobhy.

This book is described by the lamented editor, the late H. G. Evelyn White, as comprising "a selection of the more important of the leaves and fragments found by me at the Monastery of Saint Macarius in the course of archaeological investigations carried out in 1920-1 on behalf of the Egyptian Expedition of The Metropolitan Museum of Art" (vii) of New York. The production of the work, so far as letter-press, paper, and illustrations are concerned, can only be described as of superlative excellence. Its publication on these lines has been made possible by the generosity of a private donor to whose interest and encouragement the Museum's Egyptian Expedition already owes much.

The Introduction (pp. xxi-xlviii) contains a general history of the library of the Dêr Abû Makâr, some of the details not quite clear until the forthcoming volume, *The History of the Monasteries of the Mount of Nitria and Scetis*, is available. The library dates from some period subsequent to 817, when the monastery was sacked for the fifth and last time. It was after this sack that the new "Sanctuary of Benjamin" was consecrated in 830, and the editor thinks that the text numbered XXI D may be part of a discourse pronounced on that occasion. Somewhere about 1350 a great disaster took place and led to the decay of the monastery and, the editor assumes, of the library as well. This "disaster" is not specified in the present volume, but perhaps may have been the great plague which reached Cyprus in 1347 and England in 1348, and is generally known as the "Black Death." Whether this theory is right, that the Black Death was a great cataclysm from which dates the decay of the Coptic and all the other oriental churches, is as yet an open question. Such a decay did occur in the latter part of the fourteenth century: it might have been due to the influence of Islam, intermittently hostile after the Crusades, or it might have been due more directly to the Crusades, which were definitely hostile to the oriental churches. In this volume H. G. Evelyn White is extremely cautious and avoids specifying what the great disaster was: either he felt weak points in the theory he had formed as to the devastation being due to the Black Death, or he has reserved his arguments for the *History of the Monasteries*.

After the "disaster" the library fell into decay, though there was a period of book repairing in the seventeenth century. It should, however, be noted that there was a considerable output of liturgical books in the eighteenth century.

Apparently Gilles de Loches (1633) was the first to bring news to the west of the contents of the library, and the first manuscript from that source was the polyglot Barberini Psalter. Huntington visited the monastery in 1682-3, and possibly some of the Huntington Coptic MSS. in the Bodleian came from its library. On the Bohairic texts relating to St. George (p. 73) we read that "the Bodleian MS. (dated 1293) belonged to 'the church of the Virgin in the monastery of Baranus,' and may have been brought thence by Huntington." It is necessary to refer to Budge's volume on *St. George* to find what particular Huntington MS. is here cited. The foot-note here and note (7) on p. 75 refer to *Introduction*, § 5, by an error for § 6. In 1715 Assemani "obtained manuscripts of the highest quality...in the Coptic tongue." These are now in the Vatican Library (*Copt. I, v, xxxv, lvii-lxix, cf. A. Hebbelynck, Inventaire sommaire* (1924), 49). In 1839 other MSS. were procured by H. Tattam, some of which are now in the British Museum, others having found their way to the John Rylands Library, Manchester. Later visitors, Tischendorf in 1844, and Evelyn White in 1920-1, have procured only fragments, but these often of considerable value. The present volume gives a selection of these fragments, completed by Tischendorf fragments, and in some cases by Vatican texts. Here, for example, No. XVI contains 6 folios, of which 1, 3, 4, 5, were brought away by Tischendorf, 2, 6, are now added. No. XVII, also 6 folios, 5, 6, procured by Tischendorf, 1, 2, 3, 4, by Evelyn White. No. XVIII, of 7 folios, 2, 3, 4, 5, 7, procured by Tischendorf, 1, 6, by Evelyn White. These fragments, interred in a vault, seem to have been regarded by the monks in the light of sacred relics and many obstacles had to be faced by those who sought to disturb them, though, I understand, even greater obstacles have been placed in the way of those who have since tried to make any enquiries.

The texts here published comprise Apocrypha (Nos. I, III-VIII), where fresh material appears only in minor details, encomia on well-known saints (IX-XIII), martyrdoms (XIV-XXII) of Egyptian saints already known in general outline from the narratives contained in the *Synaxarium*. XXIII contains a group of texts relating to St. Macarius, some of which properly belong to the *Difnar*, or to the *Doxologia* usually attached to the *Theotokia*. XXIV consists of odes to the Saints of Scetis, one (137) apparently brought from the monastery of St. John the Little after its decay. It seems that the monks of St. John's removed to the monastery of St. Macarius but retained their separate corporate life so that in the offices there were two

choirs, one of St. John, the other of St. Macarius, whose relative functions are occasionally noted in the rubrics. Most of these odes seem to belong to the *Difnar* or similar work. They, as well as the various homilies comprised in XXV-XXXVI, are more definitely associated with Scetis, and in them occur most of the historical and topographical references which are amongst the most useful features of the collection. XXXVII is a group of Biblical fragments. The liturgical material is mostly gathered under XXXVIII, though a *Difnar* hymn appears as II, as well as the obviously *Difnar* portions in XXIII, XXIV. Most of the space here is taken up with 25 leaves of the Greek liturgies of St. Basil and St. Gregory which "supply the Greek text of several passages of which only the Coptic—and in some cases Ethiopic—has hitherto been known" (200). The *Difnar* fragments (XXXVIII, F) seem to have been brought originally from the monastery of St. John the Little. No. XXXIX contains fragments from ten vocabularies which give the Arabic equivalents for Coptic and Greek words. Twelve leaves of the same manuscript, recovered by Tattam, are now in the John Rylands Library. The editor contents himself with a description of these as well as of the *Difnar*, etc. fragments—indeed it was not found practicable to insert all these in full. The Supplement contains three texts of which two (B, C) probably belong to the *Difnar*. This and such like material would perhaps repay further research as here are found commemorations of local saints. The *Doxologia* contains a selection of the most usual hymns (*cf.* Vatican, *Cod. Copt.* XXXVIII, from the Wādī en-Natrūn, with a good share of local saints); the *Difnar* contains a complete series for every day of the year, differing from the *Doxologia* only in its completeness; the *Synaxarium* gives in prose the same lives and is presumably the source from which the *Difnar* is drawn; the various lives and martyrdoms, usually in the form of homilies for the saint's day, are apparently the material from which the *Synaxarium* was abridged. All these are co-related and should be studied together.

Appendix I contains portions of an Arabic MS. in Coptic script, edited by Dr. Sobhy: to it belong two leaves recovered by Tischendorf and now in Cambridge University Library *Add.* 1896 17. The document throws very important light on the history of the phonology of Egyptian Arabic—it is probably of the thirteenth and fourteenth century. In one place Dr. Sobhy notes that ض = ʒ, as in Turkish (and Persian) and asks "was the influence of Turkish already acting in Egypt at the date when the MS. was written?" (231). It might be pointed out that the influence of Turkish begins to appear in technical terms of theology more or less connected with the darwish orders, originally Turkish societies, which were introduced by Saladin, as Maqriẓi informs us, and became extremely popular amongst the Egyptians: thus *ḥadīṭ* (= *ḥadīth*) "conversation," but *ḥadīs* "religious tradition," *dikr* (= *dhikr*) "memory," *zikr* "a religious exercise of the darwishes," etc. Turkish influence connects with the darwish movement, not with Turkish rule. Results need to be checked by the MS. published by Galtier (*Bull. de l'Inst.*, v, 87-164) where Coptic is written in Arabic script, and by an examination of the transliteration of proper names in the *Difnar* and *Theotokia* where the names stand side by side in the two scripts. One of the most characteristic marks of Egyptian dialect to-day is the use of the demonstrative adjective (*dī, dī*) after the substantive, but in this MS. (fo. 6 verso, 7) we find هذا الفكان in the literary style, whilst *tanwīn* occurs throughout, though it must have been long obsolete in the vernacular. No doubt then, as now, men were reluctant to write the real speech of the people. To the texts are added very full indices and 28 plates illustrating the different kinds of script employed. The whole is an excellent piece of work and renews our regret at the untimely loss of the scholarly editor.

DE LACY O'LEARY.

Die auswärtige Bevölkerung im Ptolemäerreich. Von FRITZ HEICHELHEIM. (*Klio*, XVIII. Beiheft.) Leipzig: Dieterich'sche Verlagsbuchhandlung. 1925. Pp. vi+109. Mk. 7.50.

The Egypt with which the Greek papyri make us acquainted was an Egypt profoundly changed in administration, culture and even race by the influx of foreigners. However important the native Egyptian heritage, overlaid though it was by Hellenism, might be, the civilization—using the word in its widest sense to cover all the social life of the country—which the science of papyrology has revealed was in considerable measure non-Egyptian, mainly of course Greek. It is therefore of importance to discover of what race the settlers were, in what proportion various races were represented, in which centres they were chiefly found, and what were their relations to the Egyptian populace. A classified list of foreign settlers was compiled some years ago by the Scuola Papirologica at Milan (*Studi della Scuola Papirologica*, III, 3-85), and the subject has now been treated more fully and with a wider range by Dr. Heichelheim in a volume which is a good example of the German monograph, thorough, painstaking and showing considerable acuteness. It has also the defects of its *genre*; there is rather too much detail and too little attempt

to present any general picture of the position and importance of the foreign element in the population. It seems, for example, hardly necessary to mention in the body of the work every local occurrence of a foreign settler, as the author does on pp. 43 ff. Where a regular colony seems in question (*e.g.* the Cyrenaean settlement in Tholthis and Takona, p. 44) it is right to call special attention to it, but the presence of a single Chalcedonian at Oxyrhynchus (p. 49¹) can have little significance. To collect statistics of the foreigners recorded in Egypt has an object, but it is in most cases of minor interest where they were found, and the useful Appendix, which contains a prosopography of foreigners with the places of their occurrence, serves the purpose sufficiently.

Dr. Heichelheim, in a valuable section, discusses the Epigone and the problems concerning it. He accepts Woess's view that the *agogimos*-clause refers to exemption from the right of asylum, but rejects, probably with justice, his idea that this exception was due to the atrocities of Cambyses. He holds that apart from Macedonians, Cretans, Persians and Mysians the ethnic names even of late Ptolemaic papyri can be regarded as genuine.

There are some oversights; thus he regards P. Lond. Inv. No. 2243 (*Archiv*, VII, 19) as from the Arsinoite nome (*e.g.* p. 81), whereas it was very probably written at Alexandria. On the whole however his work is excellently done, and the volume will be extremely useful. It is more than a collection of facts and evidence, for in several particulars it makes a real addition to knowledge.

H. I. BELL.

Fontes historiae religionis aegyptiacae, collegit THEODORUS HOFFNER. 5 parts. Bonn. 1922-5. Pp. 932.

This estimable Latin compilation forms part of the series of *Fontes historiae religionum ex auctoribus graecis et latinis collecti*, edited by Dr. Karl Clemen. It contains all known descriptions of and references to Egyptian religion in the classical authors, both Greek and Latin, from Homer to the mid-Byzantines. The captions are in Latin, as is also the very fully documented index. There is really no more to say of a book of this kind, which will of course be of the greatest use to all students of Egyptian religion.

Die Blütezeit des Pharaonenreiches. Von G. STEINDORFF. Monographien zur Weltgeschichte. Leipzig: Velhagen u. Klasing. 1926. 2nd edition.

The second edition of Professor Steindorff's well-known work naturally appears in an enlarged form. The original edition was of only 170 pages, 3 coloured plates, and 140 figures; the new one has 221 pages, 8 coloured plates, and 185 figures. This expansion may indeed be said to correspond to the expansion of our knowledge since 1900, the date of the first edition. In twenty-six years much water has flowed beneath the bridge of Kaṣr en-Nil. The addition is fitly heralded by the substitution as frontispiece for the British Museum head of Amenophis III of the lately discovered Berlin head of Nofretiti. The new book generally follows the lines of the old one. It will be remembered that Professor Steindorff's theme is simply the Eighteenth Dynasty, which in 1900 could certainly with justice be regarded as the fine flower of Egyptian civilization, as it certainly marked the apogee of Egyptian temporal dominion. Time alters our outlook, and in 1926 one wonders whether after all the Twelfth Dynasty, or even the Fourth, is not to be regarded as more truly the *Blütezeit* of Nilotic culture than the Eighteenth, with its foreign influences from Crete and Mitanni and its conquered Syria; it strikes one as a trifle rococo, this art of the Eighteenth Dynasty compared with that of the Twelfth; and, after all, the much betrumpered artistic revolution of Akhenaten was as unnatural and as artificial as the "modernist" movements of to-day whose votaries affect to admire it so much. The Egypt of the Eighteenth Dynasty—or at all events the later half of the period—was more than a little *geputzt* and *fürdée*: she was, after all, getting on in years. But she was not yet old: she was not yet the painted hag of the Ramesside period and the days of her second childhood under the Saïtes were yet a thousand years off. And she was stately, magnificent, as she had ever been. For hitherto her splendour had been reserved for the gaze of her own people: now she was the cynosure of the world, and from far and near the chiefs came to court to bow down before Pharaoh, now truly "lord of the Nine Bow peoples," as he had never been before. The seeds of decay were set amidst this glory, in the shape (as so often happens when the juju-men are not forcibly compelled to mind their own business) of the growing and insolent domination of the priests of Amūn, against which Akhenaten justifiably, but madly, tactlessly, ineffectually revolted. However, this rotten something in the state was hidden by the panache of the Empire, the obvious power, prosperity and pride of king and

people and their chief god. The attention of the man in the street has of course of late been very effectually drawn to this worldly magnificence by the discovery of the tomb of Tut^{ankhamūn}, with its (to the man in the street) hitherto undreamt-of treasures. Students of Egypt of course knew well that such things were, and for them Tut^{ankhamūn} provided after all few absolutely unexpected surprises. The layman had never imagined a whole sarcophagus, like a bath, of massy, solid gold; but we knew what Burrahuriyash of Babylonia had said to his fellow-king Akhenaten: "Gold is as the dust in thy land, my brother!" There was not yet too much gold about, as there was in the decadent days of the Ramessides, but there was quite enough for good taste, and rather more perhaps than would have been considered in good taste in an earlier and simpler age. It is this magnificent age of the Egyptian "rois-soleil," this Versailles-period of Egyptian history, that Professor Steindorff described in the first edition of this book, and now expands by the inclusion of the new material which the work and discovery of the past quarter of a century have brought to light since its original appearance. The list of the additional matter is formidable, comprising as it does not merely the discoveries in the tomb of Tut^{ankhamūn}, but also those in the tombs of Yuya and Tuyu and of Tuthmosis IV, and that of Tiye(?), discovered by the late Mr. Ayrton, the wonderful treasures of the art of Akhenaten's time from the House of the Sculptor at Amarna, now at Berlin, the famous Cow of Hathor from Dér el-Bahri, at Cairo, many fine objects in the Carnarvon collection, and the new light shed from abroad on the art and foreign relations of the time by Evans's discoveries at Knossos in Crete and Winckler's finding of the Boghaz Kyi tablets in Anatolia. Professor Steindorff has had much of the greatest importance to include in his new edition, and he has done the work admirably. Among the more interesting less known objects of art that he figures may be noted specially the remarkable open-work bronze vase-stands at Leipzig (Figs. 132, 133, which, ordinarily, one would have said were Ptolemaic. We note that the fayence beakers with relief decoration of the type so well exemplified in the Eton College Museum are dated (by a Carnarvon example, Fig. 137) to the Eighteenth Dynasty by Professor Steindorff rather than to the Twenty-second, a moot point on which it is difficult to make up one's mind until further definitely recorded finds occur. Why Fig. 20, a female sphinx, should be of Hatshepsut does not appear: it might almost be of the later Middle Kingdom. The head of Amenophis II at Cairo (Fig. 33) is a welcome appearance as a portrait of that king. That of Tuthmosis IV (Fig. 35) is not like him, as we know from his mummy, and can only be regarded as a state portrait without any pretence to be a likeness. The format of the book is the same as before, the illustrations are of the same type, many of them, of course, repeated from the original thinner volume. But the colour-plates have been notably increased by finely produced additions, and the printing altered by the abolition of the original double columns in favour of a unified page: Gothic type is, however, preserved.

H. R. HALL.

Die Mimiamben des Herondas. Von OTTO CRUSIUS. Zweite Auflage, von RUDOLF HERZOG. Leipzig: Dieterich'sche Verlagsbuchhandlung. 1926. Pp. xvi+206.

Professor Rudolf H(erzog) has published (1926, Leipzig, Dieterich'sche Verlagsbuchhandlung) what he calls a second edition of C(rusius)' *Mimiambs* of Herondas in German with introduction and notes. A Greek text (not of a critical character) is given and several plates and photographs. So thorough is H.'s redaction that little remains in many places of Crusius, and even the translation is often changed into more correct and metrical South German where the text is the same. The publisher has economized somewhat severely in the quality of paper.

H. occupies a somewhat curious position among those who have attempted to edit Herodes. Writers of the extreme left like the present critic hold that Herodes is nothing but artifice and archaism; and that any contact of his work with the facts of life or of his time is due solely to the accuracy or contemporaneity of his sources. There is even a dark suspicion that in his proverbs, e.g. οὐτῶ κατὰ μὲνός, πρὸς τε κυσός φησι and οἱ μὲν ὁμοίως τὸν σίδηρον τρώγουσιν, the cloistered student has placed in the proverb words which properly belong to the paroemiographer whom he employed. Herodes, in short, to us is a normal, learned remote Alexandrine. The view of the extreme right, which cannot be sustained, is that Herodes picked up his mimes from the street, language and all, and employed art only in the arrangement of his material for scenic action before the vulgar by a troupe of actors. This view can be disregarded at once and by one instance out of thousands. Take the sentence IV, 73 sqq. It is certain that this is cultured art criticism: but far more is it certain that no poor Greek woman employed a dialect which admitted (in the same sentence!) of the forms κείνος and ἐκείνος.

The view of the extreme right may safely be left to the *reductio ad absurdum* of Terzaghi's edition

(Turin, 1925). But where does H. stand? H. is a scholar of German and English type (unlike Crusius), not deeply read and with no great experience of the humiliations of work on papyri, but with considerable sense and discernment, clever and tireless in profiting from the work of others. The sentence, p. xiii, l. 6: "Herondas hat in einem literarischen toten Dialekt gedichtet" need not be criticized by the extreme left. Still less the view that the Mimiambs are for acting by one man to a select audience, which is very near the present writer's position. The difference is that H. regards Herodes as a solitary figure in Coan-Alexandrine (and we may add in the whole world's) literary history. His language is the language of tradition: but his facts (and much else) are actual and living. "So ist Herondas ein Kind seiner Zeit aber...doch ein Eigener, ein Aussenseiter." Do such writers exist? And, if they do, are they, by the wildest chance, preserved to posterity?

However paradoxical H.'s position is, it has at least one alleviation. In all that concerns any efforts to restore or expand a corrupt or deficient text he is so far on the side of the angels. Unfortunately, he has yet to rid himself of Crusius' absurd deference to one of the most corrupt of papyrus texts and to the grossly careless first hand. With C. this position was due to a sheer preference for illiteracy: with H. it can be due to no other motive than subconscious piety. But where the work is that of restoring a few letters or reading doubtful ones H. is always closer to the papyrus and obtains better sense without often hitting the exact mark. But *θεὸς ἂν μόνος τοῦτ' ἔχει γέρας*. Our only real hope is a necessary cliché or literary parallel. In any case Herzog's work is a vast improvement on Crusius'.

To descend to some minor criticisms. At I, 43 H. errs with the C(ambridge) E(dition): the true reading is *φῶλη* (Bell). 47 is unsolved. At I, 80 H. errs with all of us. The slip or rather slips of papyrus on the right must be moved both upwards and outwards. The reading H. adopts in 85 is possible, 81 is *δὲς πιεῖν*, T. Gyllis *καλῶς*. In 82 *δεῖξον οὐ[κ] ἐγὼ* (or *οὐ(δ)ὲ γάρ*) *πάμπαν* becomes necessary. In I, 84 the punctuation of the Cambridge Edition is certain by comparison with v, 73, vi, 15, iii, 58: the final appeal is always cut short (with or without change of speaker). H.'s verses II, 6 *sqq.* are very unsatisfactory: in 15 *γνώστω οἶφ* (C.E. crit. app. and p. 75) remains true despite Mr. Edmond's theft of the same. In 78 Kaibel's reading is quite impossible. In VII, 7 *sqq.* the spacings which the present writer attained from Hdl.'s *νουθετημάτων* (11) was confirmed from the wormholes by Kenyon (rightly, despite E.'s assent): *νουθετημάτων* may therefore rank as certain: in 7 explain *ἄκανθαν* with Hdl. and read *ὡς ἔχων κλάη* (see Jacobsen, *Patr. Ap.* II, 590 on *κήρυκες*: esp. Eccl. Sm. *διὰ τῆς ἐπιμόνου κολάσεως* and J.'s citation from Bede). About VII, 27 H. is good: but in 31 *βαίφ λόγφ δ' ὄμνυμι πάνθ'* has a very fair chance of being right as against H.'s clumsy reading. In VII, 106 and 108 H. is deceived by bad mounting. In VIII, 27 *μάλ' εἰκότως* is quite impossible. Apparent but unreal gaps occur only after rounded letters like *ω* and *ν*. Read *καλὸν μάλ' εἶμα μέχρι τῶν ποδῶν*. VIII, 34 and 35 are very poor stuff. *αἰθρίου φρίκης* is certain enough from Hesychius' (Soph.) *ἀλεξαίθριον*. In VIII, 36 H. first adopted the present writer's reading *ἐκφέρειν τὸν λῶστον* and then changed it to *ἐξεγεγκεῖν τὸν λῶστον*, despite warnings that this was utterly impossible: here, and it is pleasant to say here only, H. follows the principles one associates rather with Mr. Edmonds. VIII, 44 contains H.'s most solid contribution to the study of Herodes. In VIII, 48 it is conceivable that he is misled by the present writer: perhaps the cheers were for the leading-in not the winning post: *καὶ φλώσαν ἀμφ' ὥμοισιν οἶα νικῶντα*. For the rest, H.'s notes are pleasant, if occasionally deceptive: we rub our eyes at I, 51 where H. solemnly gives the years in which Mr. FATPIG may have won his matches.

A. D. KNOX.



Tuthmosid royal portrait-head.
British Museum.

HEAD OF A MONARCH OF THE TUTHMOSID HOUSE, IN THE BRITISH MUSEUM

By H. R. HALL

With Plates xxvii—xxx

Plates xxvii—xxix show a remarkable portrait-head of a king in the British Museum (No. 986), now exhibited in the Fourth Egyptian Room. It was previously shown in Bay 23 of the Egyptian Sculpture Gallery, with the exhibition number 873 in addition to its inventory number 986¹. It is not inscribed, and formerly it was considered to be simply a head of Osiris or of a king of Saïte date, following an attribution by the late Dr. Birch; but several years ago I formed the opinion that it was really, whether intended primarily to represent Osiris or not, a portrait of a king of the Tuthmosid house, and so of Eighteenth, not Twenty-sixth Dynasty date. The likeness to the Tuthmoses was too evident to be ignored. Personally, I have always believed the king represented to be Tuthmosis III, and this is the opinion of M. Capart, who had noted it independently and on a recent visit to London examined the head with great care and renewed my interest in it. He unhesitatingly pronounced for Tuthmosis III, but this opinion is not altogether shared by Professor Newberry and Dr. Howard Carter, who, while fully admitting the great likeness of the head to the well-known portrait-head of Tuthmosis at Cairo², consider that there are just differences enough to preclude a definite identification with him. Professor Newberry considers that it is undoubtedly a portrait-head of one of the earlier Tuthmosid monarchs, and although Tuthmosis II has also to be taken into account, he thinks that it is definitely to be identified as of Hatshepsut: while Dr. Carter is strongly of opinion that the person represented is Hatshepsut. Mrs. Brunton agrees. This is a very interesting conclusion, since portraits of Hatshepsut are rare (since as many as possible will have been destroyed by Tuthmosis), and this would be the finest known. Professor Schäfer and Mr. de Garis Davies agree that the head is certainly Tuthmosid, and think it most probably a more conventional Tuthmosis III.

The resemblance of our head to the Cairo head of Tuthmosis III is undoubted, as will be seen from a comparison of the two profiles (Plate xxx, figs. 2 and 4). But there are minor differences. The nose of the Cairo head (obviously from its idiosyncrasy a magnificent portrait) is more prominent than that of the London head, though its bridge is of the same contour, as are also the brows. The upper lip and mouth are the same, but the angle of the lower part of the face is different: that of the Cairo head retreating at a more definite angle. Unluckily the chin of the London head cannot be seen well owing to the false beard, which has been restored, but Plate xxx, fig. 4 shows it with the beard painted out. We have to consider whether these differences are sufficiently great to preclude the identification with Tuthmosis III. The likeness is still great, and one might be inclined to regard our head as simply a less characterized and more conventional portrait of the king. Good and full of character as Egyptian portraits often are at the time of

¹ BUDGE, *Guide to the Egyptian Galleries (Sculpture)*, p. 239.

² HALL, *Anc. Hist. Near East*, Pl. xvi; *Camb. Anc. Hist. Plates*, I, 133 (a).

the Twelfth Dynasty, at the end of the Eighteenth under Amenophis III and Akhenaten, or in the early Saïte period¹, this is not always the case under the Eighteenth Dynasty until the time of Akhenaten. The Cairo head of Tuthmosis is very remarkable for its obvious truth of portraiture. Most portraits of kings before the time of Amenophis III are not much characterized, and I should be inclined to consider our head to be just what an ordinary good portrait of the young Tuthmosis would be. The salience of the profile is toned down². If we look at the other profile, taken from the right side (Pl. xxviii), I think the resemblance to the Cairo profile is, while toned down, unmistakable. Mr. Winlock's heads of Hatshepsut in *Bull. Met. Mus. N. Y.* 1923, II, Figs. 27, 28, tell us little. The nose is prominent as it also is (restored) in the Berlin sphinx-head³ of Hatshepsut. The Rome sphinx, sometimes assigned to her (BISSING-BRÜCKMANN, Pl. 37; STEINDORFF, *Blütezeit*, fig. 20) is, in my opinion, of the Twelfth Dynasty and has nothing whatever to do with Hatshepsut. The face bears no resemblance to a Tuthmosid.

Dr. Carter also considers the full-face view of our head to be more like Hatshepsut than Tuthmosis. The rather coarse and unimpressive portrait from Dêr el-bahri given by PETRIE, *Hist. Eg.*, III, 80 (cf. MASPERO, *Hist. Anc. Or. Class.*, II, 238; NAVILLE, *Deir el Bahari*, Pl. xiii), is not so successful, one would think, as those shown in the drawings by Dr. Carter in NAVILLE, *Deir el Bahari*, IV, Pls. xciii and cvi, which are extremely like our head. But so is Pl. c, which represents Tuthmosis. And so is the profile head of Tuthmosis from Dêr el-bahri illustrated in Plate xxx, 3. The fact is that Hatshepsut and Tuthmosis seem to have been very much alike, and Tuthmosis II was of the same family facial type. I am then unable to pronounce definitely in favour of either identification, though, with Professor Schäfer, I am inclined to accept the identification as an "idealized" Tuthmosis III, which is supported by M. Capart and, so far as he can judge from a quick inspection, by Mr. Davies. But it is quite possible that it was intended for Hatshepsut or Tuthmosis II. Dr. Carter's strong feeling that it is really Hatshepsut must be accorded great weight, in view of his acquaintance with the royal portraits of the time, and of course more especially those at Dêr el-bahri, and Professor Newberry's agreement is, given his special knowledge of the dynasty, important.

A point to be noted is the similarity in the two heads of the treatment of the ears and of the uraeus. Though the upper parts of the two ears are set at slightly different angles and the ear of the London head is rather larger and not so broad as that of the Cairo head, yet the fashion in which they are represented is identical and peculiar, and confirms the contemporaneity of the two. But this is of little use to decide the identity of the London portrait, since Hatshepsut and Tuthmosis were themselves contemporaries. All it proves is the Eighteenth Dynasty date of the head, if further proof were needed.

Whether the London head represented the king (although a woman, Hatshepsut ought correctly of course to be described as king, not queen)⁴ as Osiris or not, it is difficult to say. He may be wearing the White Crown merely, with no Osiride intention. The beard was restored in the past as that of a king, not an Osiris. The material is a green basalt; the height 1 ft. 6 ins. ('0457 m.).

¹ See *Journal*, XIII, 29.

² In a colossal head like No. 15 in the British Museum, true portraiture is almost entirely lost. It is of course not certain that this head is of Tuthmosis III at all; see BUDGE, *Guide (Sculpture)*, p. 105.

³ *Ausfuhr. Verzeichnis*, 1899; Alb. 22, p. 113. Cf. MASPERO, *Hist. Anc. Or. Class.*, II, 239, and BISSING-BRÜCKMANN, Text, 40 b, which gives a much nobler impression.

⁴ She called herself king, and probably had no conception of herself as a "queen regnant."



Tuthmosid royal portrait-head.
British Museum.



Tuthmosid royal portrait-head.
British Museum.



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2



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- 1, 2. Head of a statue of Tuthmosis III. Cairo.
3. Painted relief of a head of Tuthmosis III (?). Dêr el-Bahrî.
4. Head of a Tuthmosid monarch. British Museum, No 986.

THE ALEXANDRIAN COINAGE OF AUGUSTUS

BY J. GRAFTON MILNE

With Plate xxxi.

The classification of the Alexandrian coins of Augustus has one element of uncertainty which is unusual in the series struck for Egypt under the Roman emperors, in that the earlier issues are not dated. But it is perhaps possible to arrive at a closer approximation than has yet been published as regards the sequence of these issues, and at the same time to investigate the policy of Augustus as shown in his treatment of the Egyptian currency.

A few coins which have sometimes been ascribed to Augustus will be excluded from consideration¹. They are all of small size, and do not bear either the portrait of the emperor or his name: such are D. 19 (crescent: star: 9 mm.), D. 20 (lotus-flower: star: 10 mm.), D. 50 (ibis: crocodile: 15 mm.). The reason for their exclusion is that there is no certainty that they are of the time of Augustus, or even that they are official issues: in the case of D. 50, the only one which is at all common, the specimens vary considerably in fabric, and some are struck from unadjusted dies, while others appear to be cast, both of which facts point to the pieces in question being unofficial: it is true that they are dated ΛΚΑ, but dates occur similarly on pieces which are certainly unofficial, such as the leaden tokens of the third century A.D.² The same considerations apply to several of the small coins without names which have been attributed to later emperors, and notably to one or two of those which have been given by Dattari to the reign of Caligula, such as D. 112 (heron: bull): so that it seems safer to follow the British Museum Catalogue in placing them apart, and to say that, while some of them may have been struck about the time of Augustus, others of the same types are most probably much later and unofficial, and they cannot be used to establish any conclusions as to the currency of his reign³.

First group. It has been generally recognized that the first issue of Augustus in Egypt consisted of bronze of two denominations, but with the same types, only differentiated by a letter in the field of the reverse. The obverse bears the legend ΘΕΟΥ ΥΙΟΥ across the field, with a bare head to right: the reverse has ΚΑΙΣΑΡΟΣ ΑΥΤΟΚΡΑΤΟΡΟΣ, with an eagle standing left on a thunderbolt, in front of it being a cornucopiae, behind the letter Π on the larger coins and Μ on the smaller. The larger coins are about 26 mm. in diameter, with an average weight of 17·2 gm. (10 specimens weighed): the smaller about 21 mm., with an average weight of 8·3 gm. (7 specimens). These are obviously in continuation of the bronze issues of Cleopatra VII, which have

¹ References for the types are given wherever possible to Dattari, *Nomi Alexandrini* [D.] as the fullest catalogue of the series: other references are to the British Museum catalogue [B.M.], Feuardent's catalogue of the Demetrio Collection [F.] and Mionnet [Mi.]. I am indebted to Dr. Regling for information about coins at Berlin and to the late Dr. Münsterberg for those at Vienna.

² See *N.C.* 1908, 287; *Ancient Egypt*, 1915, 197.

³ These small coins, and imitations of them, continued to be used in Egypt until the end of the fifth century: see *N.C.* 1926, 43.

the same reverse type, symbol, and letters, and are about the same average weight and size: the 38 specimens of the Π coin of Cleopatra catalogued with weights by Svoronos average 17.8 gm., the 28 specimens of the M coin 8.5 gm. A similar adoption of previous types in the first issues of Augustus is to be found at other important commercial centres in the East, *e.g.* Ephesos and Smyrna—and this accords with his general policy of carrying on local administrative traditions wherever possible until he was sure of his standing.

Second group. These two types were presumably struck before the title of Augustus was formally conferred on the emperor in 27 B.C.: after this come several coins, still with the bare head, but bearing the legends (as before, across the field) $\Sigma\text{E}\text{B}\text{A}\text{C}\text{T}\text{O}\text{C}$ on the obverse and $\text{K}\text{A}\text{I}\text{C}\text{A}\text{P}$ on the reverse. The reverse types are oenochoe [D. 9], temple of Mars Ultor [D. 14], triumphal arch [D. 13]—all three of about 26 mm. diameter—and pontifical instruments [D. 10]—of 21 mm.: with these may be grouped coins with the head of Livia and the legend $\Lambda\text{I}\text{O}\text{V}\text{I}\text{A}\ \Sigma\text{E}\text{B}\text{A}\text{C}\text{T}\text{O}\text{V}$ on the obverse, the reverse-types of which are cornucopiae [D. 57] (26 mm.) and eagle [D. 56] (21 mm.). All these, like the first group, are of the thick fabric characteristic of the Ptolemaic bronze, and the marks of value Π and M are continued on the coins of Livia, though not on those of Augustus. Some smaller coins, of about 15 mm., evidently belong to the same group, as they are of similar fabric and have the square form of the letter Γ which is usual on most of the larger pieces: the legends of obverse and reverse are those of the coins of Augustus, though his portrait does not appear, the types being in one case (obverse) circular altar and (reverse) cornucopiae [D. 45], in another (obverse) prow and (reverse) wreath enclosing legend [D. 48]. These pieces have also on the obverse the letter K , which must be a mark of value, like Π and M on the larger coins¹: as they represent a new denomination, there was more reason for indicating what this was. A still lower denomination may be found in three smaller coins of about 12 mm.: one with bare head on obverse and star on reverse [D. 12], which the bare head seems to mark as belonging to this group, the others with star and prow respectively as obverse types and the legend $\Sigma\text{E}\text{B}\text{A}\text{C}\text{T}\text{O}\text{C}$ in two lines on the reverse [D. 18 and 21], which the form of the letter Γ connects with this group. The average weights are, for the 26 mm. size, 13.2 gm. (20 specimens); for the 21 mm., 6.4 gm. (10 specimens); for the 15 mm., 3.5 gm. (14 specimens); and for the 12 mm., .9 gm. (5 specimens). The date of this group, which may have begun to be issued any time after 27 B.C., comes down to 17 at least, as the types of the temple of Mars Ultor and the triumphal arch are obviously copied from those of silver cistophori struck at Ephesus which are dated in the year 18/17 (Plate xxxi): a comparison of the coins leaves no room for doubting that the Alexandrian engraver had before him the Ephesian pieces and reproduced their types in a clumsy and unintelligent manner²; and they may well have been a year or two later.

¹ The meaning of the letter on these coins was first explained by Parazzoli (*Rev. Num.* 1903, 255). Vogt's argument (*Alexandrinische Münzen*, 12) that K must be a date because it is placed on the altar on D. 45 instead of in the field as on the Π and M coins does not account for the fact that on D. 48 it is in the field. There is no analogy for a date-letter without the year-symbol Γ on Alexandrian coins: and there is no obvious reason why a mark of value should not have been placed on the type-object, especially as it is the most conspicuous and convenient place. An Egyptian used to understanding Π and M on bronze coins as marks of value would certainly take K in the same sense.

² The clumsiness of the copies can be judged from the fact that Poole and Dattari did not recognize the standard in the temple of Mars Ultor on the Alexandrian coins, but took it for a thymiaterion: the origin of the type was first pointed out by Vogt.



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1, 2. Ephesian Silver Cistophori.

3, 4. Alexandrian Bronze

The original coins are in the British Museum.

Third group. The introduction of a laureate, in place of a bare, head as the obverse type of the larger coins of Augustus marks the commencement of a new series: the coins are still undated¹, and the legends are normally ΚΑΙΣΑΡ on the obverse and ΣΕΒΑΣΤΟΣ on the reverse, around the types: on one, which has as reverse type the head of Gaius Caesar with his name, the title ΣΕΒΑΣΤΟΣ naturally goes to the obverse. With these may be grouped some coins of Livia, which have her head, but no legend, on the obverse. These pieces are of thinner fabric than those of the two preceding groups, though the diameters are about the same: the types which can be definitely referred to this group are, in the largest size (25 mm.), the head of Gaius [D. 1] and, on coins of Livia, the bust of Euthenia [D. 58], both rather rare; in the third size (15 mm.), ibis [D. 7], crown of Isis [D. 8], and crescent and star [D. 11], all three of fairly frequent occurrence: some further types which are known only from single examples [D. 5, 6; F. 546, 547, 548] may also belong here, but their rarity and the fact that they are mostly of rather abnormal design suggest that they were experimental issues. The average weights show a marked fall as compared with the second group: they are, for 6 specimens of the larger size, 8.3 gm., for 23 of the smaller, 2.5 gm. The commencing date for this series is not likely to have been before 10 B.C., as the introduction of the laureate head on the imperial coinage most probably took place in that year, and the Alexandrian mint throughout its history constantly borrowed its designs from other mints. The head of Gaius would not be placed on the coinage before 8 B.C.

Fourth group. The first certain instance of dating is on coins of year 28, *i.e.* 3/2 B.C.: these are all of the smaller sizes, and do not bear the head of the Emperor. The commonest is one of 15 mm. diameter, with the legend ΚΑΙΣΑΡΟΣ and a circular altar, on which is the date LKH, on the obverse, on the reverse ΣΕΒΑΣΤΟΥ in a wreath [D. 47]: there are single examples of two little pieces of about 10 mm., both of which have the date in a wreath on the reverse, and on the obverse one a crescent [F. 558], the other a star [Berlin], which may have been issued in this year, but cannot be definitely assigned to Augustus in view of the absence of a legend. The fact that on the coins first mentioned the legends are in the genitive, which is rather unusual in the reign of Augustus, suggests that a common coin, which has very similar types and the same peculiarity of legends, belongs to the same group: on this, which measures about 21 mm., there is an altar flanked by laurel branches, with ΣΕΒΑΣΤΟΥ in the exergue, on the obverse, and on the reverse ΚΑΙΣΑΡΟΣ in a wreath [D. 16]: the same consideration applies to two smaller pieces of 15 mm., one with ΚΑΙΣΑΡΟΣ and a capricorn and star as obverse type, ΣΕΒΑΣΤΟΥ and cornucopiae as reverse [D. 17], the other with a crocodile as obverse, ΣΕΒΑΣΤΟΥ and staff as reverse [Paris (Mi. 34)]. These coins of year 28 are probably earlier than a series which is undated, but has the legend ΠΑΤΗΡ ΠΑΤΡΙΔΟΣ with the laureate head of Augustus on the obverse: as the title of Pater Patriae was only conferred on him on Feb. 5 of his 28th Alexandrian year, and it would take some weeks, in the winter, for the news to reach Alexandria, this series, even if struck at once in honour of the event, would only come out late in the year. It includes coins of the two larger sizes (25 and 20 mm.): the reverse legend is ΣΕΒΑΣΤΟΣ, and the types are, in the first size, capricorn with star [D. 53] and six ears of corn [D. 51]², in the second the ears of corn again [D. 52], cornucopiae [D. 55], and two pilei surmounted by stars [D. 54]: of the first size there is also a coin of Livia, which

¹ The small coins with date ΛΚΑ are ruled out for reasons already given: the coin of Livia with the same date [D. 64] requires verification.

² This is another instance of a type copied from Ephesian cistophori.

obviously belongs to the same series, with $\Lambda\text{IOVIA } \Sigma\text{E}\text{B}\text{A}\Sigma\text{T}\text{O}\text{V}$ and her head on the obverse, $\Pi\text{ATP}\text{O}\Sigma \Pi\text{ATP}\text{I}\Delta\text{O}\Sigma$ and double cornucopiae on the reverse [D. 72]. All these are fairly common, and of the same fabric as the third group: the weights are very irregular, varying in the first size from 13.1 to 6.8 gm., in the second from 6.5 to 4.1, and in the third from 4.3 to 1.6: the averages are respectively 10.7 gm. (24 specimens), 5.6 (14 specimens), and 3.1 (10 specimens).

Fifth group. The large undated issue, if not made in the latter part of year 28, may have been in year 29: in year 30 (1 B.C./1 A.D.) dated coins reappear, but at first rather spasmodically: the types vary considerably, and specimens are rare, till year 39. Those of year 30 are, in the two largest sizes, *obv.* laureate head, *rev.* bust of Nilus [D. 32 (24 mm.), 33 (19 mm.)], in the smallest size, *obv.* laureate head, *rev.* oak wreath enclosing date [D. 36], and *obv.* star, *rev.* $\Sigma\text{E}\text{B}\text{A}\Sigma\text{T}\text{O}\text{V}$ round date [Oxford]. In year 35 the only issue seems to have been of the smallest size, with *obv.* crescent, *rev.* similar to the last-mentioned of year 30 [D. 49]. The larger sizes recurred in year 38, all with laureate head on obverse: the reverses are, in the first size, $\Sigma\text{E}\text{B}\text{A}\Sigma\text{T}\text{O}\text{V}$, bull butting r., in ex. ΛH [D. 35], and capricorn r., in ex. $\Sigma\text{E}\text{B}\text{A}\Sigma\text{T}\text{O}\text{V}$, to l. ΛH [D. 34]: the latter type is also found in the second size [Paris (Mi. 16)]: in the smallest size there is a coin of the same types as that of year 35 [Berlin]. The evidence as to weights in this group is too scanty to make any conclusions of value: so far as it goes, it agrees generally with the averages of the fourth group.

Sixth group. In year 39 a more regular series began, and continued till the last complete year of the reign of Augustus: there are coins with his laureate head, or the head of Livia, in the three larger sizes, with several reverses, one being shared by the Emperor and Empress: the types are, for Augustus, bust of Euthenia r., with $\text{EY}\Theta\text{H NIA}$ across field, and date in exergue, and Nike flying l., with date in field; for Livia, modius flanked by torches, with date in exergue, and Athene standing l. holding Nike and resting on shield, with date in field; for both, oak wreath enclosing date¹. The occurrence of these varieties, most of which are fairly common, may be shown best in tabular form.

			YEAR 39	YEAR 40	YEAR 41	YEAR 42
Size 1 (24 mm.)	Augustus	Euthenia	D. 22	D. 24	—	—
	„	Nike	—	D. 25	D. 28	D. 30
	„	wreath	D. 37	D. 40	D. 42	—
	Livia	modius	D. 69	—	—	—
	„	Athene	—	F. 575	D. 61	D. 63
	„	wreath	D. 66	BM. 31	D. 67	—
Size 2 (19 mm.)	Augustus	Euthenia	D. 23	—	—	—
	„	Nike	—	D. 27	D. 29	D. 31
	„	wreath	D. 38	D. 41	D. 44	—
	Livia	modius	D. 71	—	—	—
Size 3 (14 mm.)	„	wreath	D. 65	BM. 32	D. 68	—
	Augustus	wreath	D. 39	BM. 15	Hunter 16	—

The average weights of the three sizes are 9.0 gm. for 46 specimens of the first, 4.2 gm. for 11 of the second, and 1.9 gm. for 14 of the third: the flans are much thinner than those of the earlier groups, though the diameters of the various sizes are not much reduced.

The values attached to the different denominations in the various groups remain to

¹ The coins with *rev.* date in wreath described by Dattari as of Tiberius [D. 73—77] and by Poole as of Drusus [BM. 35] are certainly of Augustus, as pointed out by Vogt (*op. cit.* 15).

be determined: and for this purpose the weights are only a rough guide, as the coinage was purely a token one: but, taken in conjunction with the sizes, they offer some clue. The first and last groups provide most material for consideration, and can accordingly be taken as a beginning.

The first issue of Augustus, as already noted, was a continuation of the latest Ptolemaic bronze coinage, of two denominations, marked respectively Π and M , which, as demonstrated by Regling¹, represented 80 and 40 copper drachmas. These, for purposes of reckoning on the silver standard, would serve as obols and half-obols, as the rate of conversion from copper to silver was normally about 480:1 at this time.

The latest series is clearly one of three denominations, and by size and weight is linked to the bronze issues of Tiberius and Claudius, which represented the diobol, obol, and dichalkon of the silver standard². The superficial sizes of the two larger denominations are not seriously reduced from those of the first issue, but the weights are much lower.

It appears therefore that during the reign of Augustus a change was made in the basis of the bronze coinage: and the point at which it was made, and the purport of the change, may be ascertained more readily by setting out the average weights for the various groups as detailed above: the fifth group is omitted as offering no definite evidence.

	<i>Size 1</i>	<i>Size 2</i>	<i>Size 3</i>	<i>Size 4</i>
1st group	17.2	8.3		
2nd group	13.2	6.4	3.5	9
3rd group	8.3		2.5	
4th group	10.7	5.6	3.1	
6th group	9.0	4.2	1.9	

The second group is on the same basis as the first, as the marks of value are continued on some of the coins, notably on the new denomination of 20 drachmas: but there is a considerable reduction in the average weights. In the third group there is a further fall in weight. In the fourth, however, there is some recovery, though the weights are still below those of the second. The sixth again shows a drop, and also the average weight of size 3, instead of being rather more than half that of size 2, is less than half. It may be suggested that the explanation of these facts is that in the second group the old values of 80 dr. = 1 obol and 40 dr. = $\frac{1}{2}$ obol continued, with a 20 dr. = dichalkon and a small piece, possibly of 5 dr. = $\frac{1}{2}$ chalkus³, and the first and third of these denominations were still issued in the third group: but the weights had gradually gone down to about half of what they had been at the beginning of the reign, and in the fourth group, which is one of the more extensive issues, the values of sizes 1, 2 and 3 were doubled, making them represent the diobol, obol, and half-obol, with some increase of weight, though not proportionate to the increase in value: in the sixth group the diobol and obol continued, the weights again falling, but the lowest denomination was the dichalkon instead of the half-obol, as in later reigns. There was probably no use in Roman times for anything smaller than the dichalkon⁴.

Further, it is to be noted that in the reign of Augustus the Ptolemaic system of accounting in "copper drachmas" disappears almost entirely from the statements in

¹ *Zeitschr. f. Num.* 1901, 115.

² See *Liverpool Annals*, VII, 59.

³ The 5-drachma piece was known under the Ptolemies: see *Liverpool Annals*, I, 38.

⁴ See *Liverpool Annals*, VII, 57.

papyri and ostraca, and the normal method of reckoning is on the silver standard: isolated instances of the old formula occur down to the beginning of the second century, but in all probability they are only archaistic survivals such as are found in many other connections in documents of the Roman period from Egypt¹. This fact, taken in conjunction with the disappearance of the marks of value on the bronze coinage and the presumed revision of the valuation, points to the conclusion that Augustus directed a reorganization of the bronze currency on a silver basis, which took effect somewhere between 8 and 2 B.C.: his intention was doubtless to bring the Egyptian monetary system into a fixed relation with that of the Empire generally, and to stabilize the exchange, although he did not touch what was the key of the latter problem—the depreciated silver tetradrachm of the Ptolemies—and so the real difficulty remained unsolved.

¹ For instance, the dating in the third century at Herakleopolis by the Macedonian months (*P. Stud. Pal.* xx, 28, 35, 47) or by the old Ptolemaic formula of the eponymous priests (*P. Stud. Pal.* xx, 25, 29).

CHRISTIAN NUBIA

By J. W. CROWFOOT

With Plates xxxii—xxxv.

§ 1. *The Approach.*

The chronicles of Christian Nubia, which have been compiled by patching together the relevant extracts from medieval writers who were primarily concerned with things Egyptian, make melancholy reading¹. One gets an impression of the same kind from a string of quotations from the classical writers who had occasion to refer to this country in the centuries before the introduction of Christianity. In neither case does the character of the archaeological remains of the two periods give any colour to the dreary impressions which we get from the literary records. In the records there is some confusion and, wherever figures are given, some exaggeration, but the apparent contradiction between the two sources or, as one may describe it, the distorted perspective suggested by the writers, is due mainly to the accident that most of the extracts have to do with exceptional moments when Nubia was either in trouble and appealing for help or else herself making trouble for Egypt. That these moments were abnormal is proved by the long duration of Christianity in the country. We must discount our first impressions, therefore, if we wish to see things as they really were, and start rather from a fresh standpoint.

There are one or two preliminary observations to be made before we turn to the Christian remains.

In the first place, Nubia is one of the few countries in the old world which adopted Christianity without having passed under the discipline of Roman law, because after some hesitation the Romans wisely decided that it was too poor and remote to justify the cost of conquest and administration. The old native cultural organization which had been disturbed in Egypt by a succession of foreign conquerors—Persian, Macedonian and Roman—was here relatively intact: some relics of divinity still hedged the king and gave a traditional stability to the body politic. Greek and Roman trade, on the other hand, had brought new luxuries into the country—much finer objects have been discovered in the tombs of the royal family at Meroe than ever reached the shores of Roman Britain—but no coins were minted here and very few stray ones have been found, nor any of the mosaic pavements which are so characteristic of the regular Roman civilization—both economically and politically the land was in the stage of pre-Ptolemaic Egypt².

¹ The literary evidence has been excellently summarised by ROEDER in *Zeitsch. f. Kirchengeschichte*, xxxiii, 364 ff. Most of the evidence will be found also in MACMICHAEL, *A History of the Arabs in the Sudan*, vol. I, and in BUDGE, *The Egyptian Sudan*, II, Ch. 12 and Ch. 15. The classical evidence for the centuries preceding the introduction of Christianity has been collected in a convenient form by WOOLLEY and MACIVER, *Karanog*, Text, 99 ff.

² Photographs of some of the finer objects found by Reisner at Meroe will be seen in the *Boston Museum of Fine Art Bulletin*, xxi, April, and xxiii, June. See also DOWS DUNHAM, *Two Royal Ladies of Meroe*, in *Boston Museum Communication to the Trustees*, vii.

Secondly, on the intellectual side the people were, and for centuries had been, what we must call a cultured race: some Greeks regarded them as the first parents of all civilization, and Herodotus himself felt no qualms about equating the gods of Ethiopia with his own. They had been long familiar with hieroglyphics, and about the beginning of our era they invented a script of their own: a little later, but before the general introduction of Christianity, both Blemyan and Nubian kinglets were aping the ceremonial of a Byzantine court and keeping legal records in execrable Greek. If they had not been a civilized race and had not impressed other civilized races as such—if, for example, they had been an uncultured negroid tribe¹—can anyone who knows anything of the Greeks imagine that the Church in Constantinople would have sent missionaries to convert them to Christianity?

At the time of their conversion the Nubians were in possession of an ancient and complex culture: much of this culture had come originally from Egypt, much of it they shared with the nomad tribes in the desert, with whom we find them frequently acting in concert during the Christian period: some new acquisitions had come from recent contact with Mediterranean peoples. The humbler elements of this complex have persisted beneath a veneer of Islam down to the present day, and so, when we turn to the ancient material, we shall find that, with our knowledge of what went before and after Christianity, we can place the accidental and fragmentary finds of the archaeologist in a more vivid context, and thus still further correct and amplify the written record.

§ 2. *The character of Nubian Christianity.*

In the Northern Sudan Christianity lasted for some eight centuries or more, and extended over a vast area: ruins of a church have been found as far south as Gebel Segadi, near Sennar, and for a long time Christianity must have been the religion of the bulk of the settled inhabitants from the frontiers of Egypt to those of Abyssinia. In this long period and over this wide area it doubtless passed through many phases, but about these probably we shall never know much. In the south, in the medieval kingdom of Aloa, we know, from the type of pottery found on post-Meroitic sites in the Berber province and on the Blue Nile, that there was an early decline in culture: very little painted or wheel-made ware has been found on late sites here, and the preponderant

¹ With regard to the racial question, the available material does not seem sufficient to enable us to say in what degree different races have contributed to form the present population of the Northern Sudan, but it has not been proved yet that negroes were ever dominant north of their present northern limits, *i.e.* far south of Khartoum. Junker has discussed the racial character of the people living in earlier days south of the Egyptian frontier (*Journal*, VII, 121), and to the evidence he has collected the following may be added:

(a) About 700 to 500 B.C. the population of Gebel Moya, about Lat. N. 13° 30', is described on good evidence by Reisner as "a mixed race with negroid characteristics not greatly unlike the present inhabitants of that district" (*Sudan Notes and Records*, II, 65), which means that there were at that time people who were not negro as far south as this.

(b) Although it is the fashion to refer to the Ethiopian dynasty as negro or negroid, the highly individualised portraits of Tirhaka and other early kings of this dynasty found at Gebel Barkal, forbidding as they are, show no negro traits and the family claimed a Libyan origin (*S. N. and R.*, II, 246).

Luschan's views about the Nubians of to-day (in MEINHOF, *Die Sprache der Hamiten*, Hamburg, 1920) are quite untenable: contrast with them the remarks of SELIGMAN, *s.v.* Nuba, in *Hastings' Encyclopedia*. Personally, I have been surprised again and again at the frequency with which one sees all over the northern Sudan types indistinguishable from those of the ruling class at Thebes in the Eighteenth Egyptian Dynasty. In the sequel we shall see how little reason there is to connect these types with recent Arab infiltrations.

ware is the hand-made stuff with textile impressions similar to that which is in use today. The decline is particularly noticeable at Meroe itself, as may be seen in the certainly late grave-groups excavated by Garstang and mistaken by him for early works on account of their primitive character¹. This decline took place before the conversion to Christianity, and one is tempted to connect it with some change in the ruling class at Meroe, such as might result from an Axumite invasion or the quarrels of "Red" and "Black" Nuba, which are apparently referred to on the Axum inscriptions published by Littmann in the volumes of the *Deutsche Aksum-Expedition*, but this is purely hypothetical: what is certain is that the southern kingdom, though the richer in natural resources, was further than Dongola from the good and evil of Egypt, from the wealth and the stimulus which Egypt could give in the days of her prosperity, and from the dangers threatening when she was unable to control the disorderly tribes within her borders. To this geographical fact I should attribute therefore both the earlier decline of civilization in the south and the longer survival there, by a century or two, of Christianity. In what follows we shall be primarily concerned with the northern kingdom, though much that we have to say will be applicable also to the south.

In order to get the background of our picture, we will first glance briefly at some of the common social customs, practices and material objects, which were in vogue in pre-Christian days and have lasted on to the present.

Among the contributory causes of the downfall of the kingdom of Dongola, Ibn Khaldûn² noted the rule of matrilineal succession which still obtained there: the same rule still holds in remote parts of the Sudan, in parts of Darfur, for example, and on some of the Nuba hills, and the oral traditions of many tribes prove how prevalent it once was before the establishment of the Islamic canon: its survival in Christian Dongola is a forcible reminder that we are outside the pale of Roman law, in the presence of a more primitive organization. Another survival, also now found only in remote parts, is the cotton cap with two horns stuffed with straw which is still worn at Rashâd, in the Nuba mountains, as a symbol of kingship: a similar horned cap was worn by a Nubian king depicted in the church at Old Dongola—the painting has only perished recently—and by kings represented at Faras and at Shêkh 'Abd el-Kader, opposite Halfa, and it is mentioned as a princely attribute by Abu Sâlih³. With this cap Abu Sâlih mentions also the golden bracelet, and a bracelet, now usually of silver, is one of the ornaments regularly worn by bridegrooms and boys when they are circumcised, both ceremonies being assimilated to coronation rites in popular thought. The golden bracelet has survived also, as already noted by MacMichael⁴, in the name of a great native family, the Sowar el-Dhahab, and the site of Old Dongola actually still belongs to one branch of this family.

The survivals just mentioned, being concerned with what may be called the public life of the community, have been driven into the wilds by the new governmental institutions established in the Sudan during the last hundred years, but in the domain of private life survivals are everywhere more numerous. The picturesque and elaborate rites, for example, which are observed on the occasions of births, circumcisions and weddings, have so much in common with those observed among Christian tribes in

¹ GARSTANG, *Meroe*, 1911, 32. See also *S. N. and R.*, VII, 27.

² IBN KHALDÛN, *History of the Arabs*, v, 429 (in Arabic).

³ See GRIFFITH, *Liverpool Annals*, XIII, 77; FRESHFIELD, *Cellae Trichoreae*, II, 164, and EVETTS and BUTLER, *Abu Salih*, 260.

⁴ *Op. cit.*, I, 177.

Eritrea and contain so many features that are obviously pre-Christian¹ that we may be certain they played also a great part in the life of Christian Nubia. Another primitive custom which has persisted through several dispensations is the barbarous custom of female infibulation: it is called the Pharaonic rite and hitherto has resisted the efforts of Islam to end it; one wonders whether Christian bishops also protested against it in their day.

On the material side the same phenomenon of persistence meets us. The most important articles of domestic furniture in these parts today are the stools and bedsteads with mortised legs and a webbing of string or leather which have survived at least since the Kerma period, 2000 B.C.² Similarly, the coiled basketry, the plaited mats, the plain white woven cotton (*damûr*), the girls' leathern skirt (*raḥat*), the water-wheel and *shadâf*, persisted from earlier days throughout the Christian period.

The background being thus outlined, we can try to fill in the picture with details which archaeological research has shown to be characteristic of the Christian age in particular.

The building traditions in brick, burnt and unburnt, which formed part of the ancient inheritance were now developed on new lines. Mr. Griffith has published the plans of three churches which he cleared at Faras and these, with the churches already published by Mr. Mileham and Mr. Somers Clarke³, show how much their builders owed to the new plans which were being used by Christian architects elsewhere. The most characteristic plan in Nubia is that of a small basilica with entrances from the north and south aisles, a stairway to the roof at the south-west corner and a small room of unknown use at the north-west corner, and at the east end three internal apses, often with a narrow passage behind the central apse connecting the prothesis with the diaconicon: remains of seats round the central apse, of a screen corresponding to the modern iconostasis, of an altar and an ambo, have been found in some churches. This is the type which with slight variants is found in Lower Nubia, in Dongola province at Wâdî Ghazâlî and Gebel Bakhît, for example, and in the far south at Segadi. The new plans were introduced, of course, by those who were responsible for the evangelisation of Nubia.

The church at Old Dongola, now used as a mosque, is so different in plan that Mr. Somers Clarke refused to regard it as a church at all⁴: the upper storey of this building, the present mosque, is approached by a fine stairway which occupies the centre of the western portion, and contains a square chamber round all four sides of which a broad ambulatory runs: the central chamber has a flat roof supported on four columns, one of them wooden; the walls of it were once covered with paintings, now partly destroyed, partly hidden under coats of plaster, and it was entered from the ambulatory on the north, west, and south sides: in the east wall of this chamber there is a small niche and in the external wall of the church behind the niche there is an apse which has been reconstructed. On the ground floor, immediately beneath the east and west sides of the ambulatory, are galleries which are joined together by five dark narrow aisles which can hardly have served as anything but stores. As I have elsewhere pointed out⁵, the upper floor closely resembles the plan of an Abyssinian church near Adowa, and if a

¹ On these rites see *S. N. and R.*, v, 1—28, and II, 85 ff.

² REISNER, *Kerma*, II, Ch. 27.

³ GRIFFITH, *op. cit.*; MILEHAM, *Churches in Lower Nubia*, Philadelphia, 1910; SOMERS CLARKE, *Christian Antiquities in the Nile Valley*, Oxford, 1912.

⁴ *Op. cit.*, 43, 44.

⁵ *The Island of Meroe* (*E. E. F. Arch. Survey*), 40.

connection between the two could be established it might throw light on the later history of Nubia, for the Dongola building belongs certainly, I think, to the later part of our period. Many of the churches in this district were built of red bricks, and have consequently been much more destroyed by seekers after building material than the mud-brick churches in the north, but the plans could probably still be recovered by careful excavation, and, until this has been done and the plaster also has been scraped off the walls at Old Dongola, it would be wise to keep an open mind on the subject.

On another point we can speak with more confidence: the sites of old churches hereabouts are often marked by granite capitals and columns as well as red bricks. Now the Ethiopian and Meroitic builders used only the soft and perishable sandstone of the locality for the columns and capitals of their temples: the Christians, therefore, were taking a notable step in advance when they employed granite and other hard stones for these architectural members. The late columns and capitals, several of which, said to have come from Khalêwa, have been collected in the garden of the District Commissioner at Dongola, while others are to be seen at Old Dongola, on Ganetti Island, and in the Latti Basin, are roughly carved but accurately enough to serve their purpose: a popular type of capital with broad palm-leaves at the corners¹ was derived from contemporary Egypt, where it is not uncommon.

Like the buildings, the pottery of the period shows that the Christian craftsmen not only maintained but developed the crafts they had inherited. Mr. Griffith had the good fortune to find a potter's kiln and workshop with several unbroken pots, some of them waiting to be baked: these pots clearly belong to the last days of Christian Faras and though, as the finder says, they show some of the skill displayed in the proto-dynastic, C-group and Meroitic periods, they are not really much better than the best painted ware now made in Upper Egypt². Fragments of much finer ware, dating probably from the earlier Christian centuries, are to be found in large quantities at Wâdî Ghazâlî and elsewhere in Dongola province: on some of these the paste is finer, the slip harder, and the decorations more carefully drawn and more varied than on Meroitic ware, and one sees motives which point to Byzantine influence, a floreated cross and a vine with bunches of grapes, for example, side by side with old Meroitic patterns. The Meroitic connections are so plain that we must assume that "Meroitic" pottery was made for a considerably longer period than previous writers have allowed, though not necessarily in the cemeteries with which they were concerned. It is, perhaps, because the natives valued their own products that we find so little that looks like an import from Egypt: I can recall no fragment of the ware with metallic lustre so common at Fustat, and only one or two pieces with the green or orange and brown Mamluk glaze, all of them found either at Old Dongola or Meilnarti, the medieval Isle of Saint Michael, near Halfa, the two places most often mentioned by Arabic writers.

The frescoes at Faras rescued by Mr. Griffith and his assistants are doubly welcome because so few paintings have been preserved, and yet paintings, if not wholly conventional, are likely, far more than architecture or pottery, to bring us into touch with the spirit of the people. The most interesting of the Faras paintings represent a Nativity, a cross transfixing Adam's head, a military saint on horseback, a Nubian king and a bishop. These pictures all come from church walls, and so it is natural that conventional elements should predominate: judged as conventional church pictures, they are, like so many other paintings in this category, in both east and west, of no great artistic merit, but they show that Nubia had reached a respectable level in the representation of

¹ Cf. GRIFFITH, *op. cit.*, Pls. xxxvii, xxxix, lxii.

² MACIVER, *Journ. Anthr. Inst.*, xxxv, 1905.

symbolical subjects and in the portraiture of dignified officials. The artist, however, was not always and everywhere trammelled by convention: there are one or two of the smaller figures, for example, the angel and shepherd in the left-hand corner of the Nativity and the kneeling figure on Plate lx, which show real feeling for movement, and even in the stiff row of Apostles on Plate xxxvii there is a liveliness of expression which one does not see on the works of every *pictor ignotus*. The same sense of movement is seen in the picture of the horseman, which reminds one of the Persian vase-painters or the mosaics of Roman Africa more than of Coptic ikons. Mr. Griffith truly writes. "These pictures can hardly be paralleled from Egypt, and seem to have a closer affinity to Byzantine than to Coptic art," but the Byzantine affinities, I submit, were confined to the conventional elements; it seems to me that the details to which I have drawn attention are expressions of the spirit which occasionally peers out in the Meroitic period, when the artist escapes from other conventions, Egyptian or Greco-Roman. Most of the Meroitic tomb and temple sculpture in the late Egyptianising style is dreary stuff, the representations of cattle, oddly enough, being particularly feeble, and when the Meroites attempted something in the Greco-Roman style—the figures in the round, for example, which were unearthed in the town of Meroe—they produced the most horrible salad imaginable: but if we turn from these to the fantastic reliefs at Masowwarât el-Sufra or the curious figures on the outer wall of the temple in Wâdî el-Banât¹, we find ourselves in another world where things are freshly conceived and truthfully executed. At first sight one thinks some amusing Pompeian artist must have found temporary employment here, but when one notes occasional glimpses of the same spirit among the generally careless and incompetent drawings on Meroitic pots and again on these Christian paintings, one is tempted to ask whether all three are not expressions of the same African genius. The material unfortunately is so scanty that one cannot do more than pose the question. One feels that one is "burning," but one cannot quite grasp the quarry.

To turn to the inscriptions, three written languages at least were in use in medieval Nubia—Greek, Coptic and Nubian—which is in itself a proof of considerable intellectual activity. The translation of religious works into the vulgar tongue and the reduction of this to written form is what one might expect of people who had already devised an independent script of their own, but for some unknown reason, except at Soba, only Greek and Coptic seem to have been employed on gravestones, the former the more commonly. No one who has read many late inscriptions from other parts of the ancient world, especially from places where Greek was not the vernacular, will be surprised at the errors in grammar and spelling which occur in many of these epitaphs: the correctness of a few of them, both Greek and Coptic, is much more surprising and shows that for a time at least there were good scholars in the land. Several of the inscriptions are dated, the dates ranging from the ninth to the thirteenth century. Women as well as men were commemorated in this way. The feature, however, which throws the most instructive light on the psychology of the time is the impersonal character of the inscriptions: like so many medieval epitaphs in Europe, they contain nothing but the name, age and, sometimes, date of the deceased, with prayers to God and recommendations of the departed to His mercy and forgiveness. In a few cases the ecclesiastical office of the deceased is mentioned, but there are no biographical details, no *cursus honorum*, such as one sees in some ancient Egyptian tombs and regularly on Roman epitaphs in the western provinces of the Empire: in the eastern provinces, where "other worldly" religions like that of Osiris were prevalent, the funerary inscriptions even in pagan times

¹ BUDGE, *The Egyptian Sudan*, II, 149 ff.

were much less interesting. Our Nubian inscriptions do not refer even to the parentage or descent of the deceased like the almost equally jejune Arabic inscriptions of the same time. It shows how much religion and preoccupations with the hereafter counted for in Christian Nubia, the more so as these inscriptions are by no means niggardly in length.

From a combination of these different data with the meagre records of contemporary writers we can draw a fairly coherent picture of Christian Nubia which, I submit, differs profoundly from that which exclusive attention to the written word has suggested to others. In the Christianity they professed the Nubians were much like the rest of the then civilised world: they had, of course, deacons, priests and bishops, and they built many churches and monasteries. They were as barbarous as people were elsewhere, but there is no evidence to show that they were more so: kings tortured and blinded their enemies in Nubia as in Constantinople or England, but here, as there, kings also retired into monasteries and engaged in amiable theological arguments with Muslim envoys. To judge from their inscriptions, they were as deeply concerned about the salvation of their souls, and the knowledge of religious texts and liturgies was as real and, at least, as widely diffused. Their art-conventions were in most respects the conventions of the Orthodox Church in other lands. Where they differed from other Christians was in the character of the old culture on which their Christianity was grafted. They adopted a new script and, naturally, adapted their building traditions to the needs of the new cult, but a durable equilibrium between new and old was reached without revolutionising every department of life: the old house-crafts were carried on much as before: in their homes they celebrated the same charming and elaborate festivals (*rites de passage*) at all the great turning-points of human life: they did not change their customary rules of inheritance and succession: their kings slipped easily into the niches which their pagan predecessors had filled, and figured as conspicuously in churches as the latter on temple walls. One apparent innovation, the common but not invariable adoption of new personal names like Zakaria, Cyriacus and George, is parallel to the practice of modern missionaries who christen their dark converts such names as Stanislaus, Ercole and Barnabas: in both cases it has been imposed by the old African belief in the magic of a name which sometimes makes a new name necessary at each new stage of life: it is therefore another expression of their conservatism. It was because Christianity was identified so intimately with the more important forms of the old native organisation, and in particular with the kingly office, that it survived so long in the Sudan after it had fallen in the Romanised provinces of North Africa. The kings had a double part to play: they were the centre of the native state and the source of its stability, they were also the channels through which its contacts with the outside world were made: so long as they remained staunch, and only so long, was the country secure from relapsing into African barbarism.

§ 3. *The end.*

In the northern Sudan the end of Christianity as the religion of the native ruling class came in the fourteenth century. A sharp light on the last throes of Christianity in Dongola is shed by a chapter in Ibn Khaldûn's *History of the Arabs*, which was written towards the close of the same century: Ibn Khaldûn is a political thinker of such penetration that his account deserves the closest attention, and it is unfortunate that the book has not been translated into a European language, and the latest English discussion of this chapter contains an inadequate version of the most important sentences in it¹.

¹ IBN KHALDÛN, *op. cit.* There is a good discussion and translation of part of the chapter in an article by C. H. BECKER, *Der Islam*, I, 159.

According to Ibn Khaldûn, the beginning of the fourteenth century was a troubled time in Nubia: one of the princes turned Muslim, the royal house was divided against itself, and bands of Juheina Arabs swooped down from Upper Egypt, raiding far and wide, much as the Nubians themselves had been wont to do in Egypt. After some fruitless efforts at resistance, the Nubian princes came to terms and some of them gave their daughters in marriage to Arab sheikhs, just as the Beja tribes in the desert had intermarried with the Rabi' Kais Arabs a few centuries earlier. As the same matrilineal rule of succession was in force among both Beja and Nubians, in both cases half-Arab children became the lawful heirs of great native families. Among the Beja the consequences were not serious; there was little that the Arabs could destroy and they were soon absorbed completely in the native tribes who have clung to their special tents and their own Bedawi language to the present day. The Arabs did not even introduce the common Bedu methods of spinning and weaving: the Beni 'Amer women use a spindle without a whorl and the Hadendowa weave blankets without a heddle. As an Arteiga sheikh from Suakin once told me, there is nothing Arab about these people now except their pedigrees and their religion.

Among the Nubians on the river it was very different: here Christianity had been established for some centuries and there was a developed polity rooted in still more ancient traditions. The passing of this polity is described by Ibn Khaldûn in the following significant sentences: "Their kingdom was torn in pieces and the Juheina Arabs took possession of their country. No kingly government or policy was possible by reason of the ruination which prevented any union between the princes and split them into factions at this time. Not a trace of kingly authority remained in the country, and the people are now become Bedu, following the rains about as they do in Arabia. Not a trace of kingly authority remained in the country because intercourse and union with Bedu had changed it and dyed it a Bedu hue." In these rhetorical phrases Ibn Khaldûn gives free vent to his dislike of the Bedu as destroyers of culture and incapable themselves of building any stable and disciplined state, but his prejudices guided him to a true sense of the real character of the Arab conquest. The Arabs did not overwhelm the country by their numbers, but by dethroning the kingly houses they dealt a mortal blow at the heart of the old polity and all the higher cultural manifestations which had flourished round the throne. As a written language, Nubian disappeared, roofs with brick arches were no longer built, painted wheel-made pottery (made *perhaps* hitherto in royal or princely factories) died out, and the churches in which the kings had figured so prominently gradually fell into ruin after the fall of the kings. On the other hand, the commoner crafts and processes and social customs remained, as a spoken language Nubian survived, and, *pace* Ibn Khaldûn, the people of Dongola did not turn nomad, "following the rains about," because in Dongola there are rarely any rains to follow: the Arabs and half-Arabs who yearned after Bedu ways must have moved further south to realise their ideals in Kordofan or east of the Nile.

We do not know whether or how long the people in Dongola kept up any Christian practices, but there is a little evidence about the southern kingdom, and a few references to Nubians in general are to be found in the records of pilgrims to Palestine published by the *Palestine Pilgrims' Text Society*. About 1180 Jacques de Vitry refers to Nubian Christians as still practising circumcision¹: a hundred years later, in 1280, Burchard of Mount Sion refers twice² to Nubian pilgrims, and it was probably in the same century that they acquired possession of the place in the Church of the Holy Sepulchre known

¹ *P.P.T.S.*, 1896, 73.

² *P.P.T.S.*, 1896, 3 and 104.



2



4



1



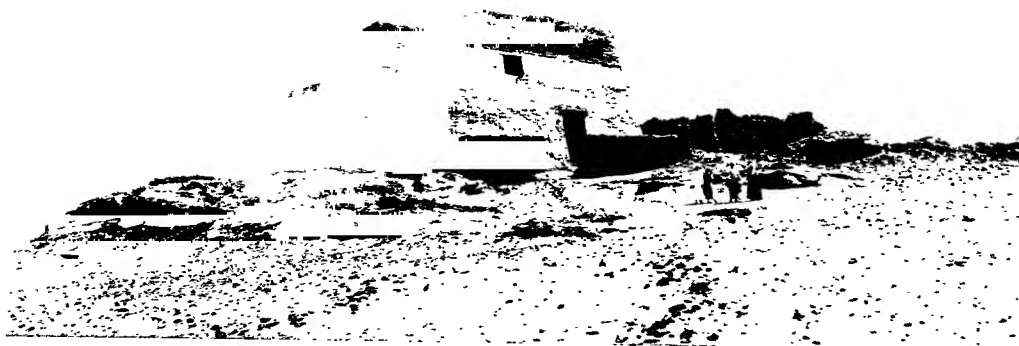
3

Pottery of the Christian Period from the Soudan.

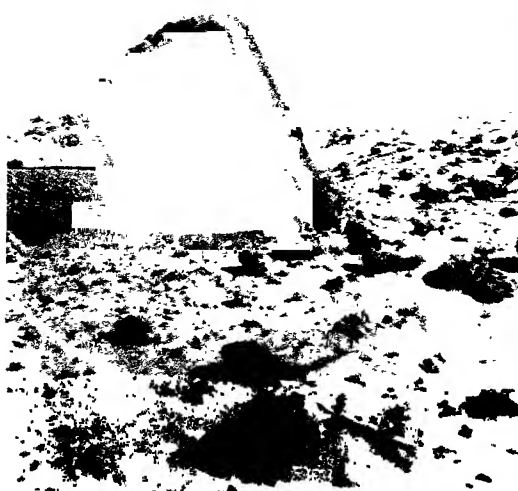
1. From Abu Haraz 2. From Shendi.

3, 4. From Wad el-Haddâd.

Scale. the alternating black and white spaces on the paper scale represent centimetres.



1



2



3

Christian Nubia.

1. Old Dongola church.
2. A fallen capital near Old Dongola.
3. The King of Rashâd in the horned cap of royalty.

as Adam's Chapel, where Adam's skull was believed to have been found. This chapel is called the Chapel of the Nubians by Ludolph von Suchem in 1350¹, but before the close of the next century it had passed into the hands first of the Armenians and then of the Georgians, though Felix Fabri, who gives this information, still (c. 1480) calls it the Chapel of the Nubians². The same pilgrim also on two occasions mentions meeting Christian Nubians in Jerusalem³.

In the south it seems that the Christians maintained a precarious ascendancy until the beginning of the sixteenth century when Soba, their capital, fell before a combination of Fung and Arab. In the third decade of the same century Alvarez, a Portuguese missionary, says that the Nubians sent to Abyssinia to beg for "priests and persons to preach and administer the sacraments to them," and stated that they "had often sent to Rome for a bishop, but as they had received no assistance in this respect, they, little by little, lost all knowledge of the Christian religion⁴." The envoys may have been exaggerating when they spoke of repeated missions to Rome, but there is no reason to suppose that the people immediately embraced Islam. It may be doubted whether their conquerors, Fung or Arab, took much interest in any religion, but the conquest created a medium more favourable to the growth of Islamic than of Christian characters: the first Mohammadan doctors and "holy men" came from Egypt, Bagdad and Morocco, just about the time to which Alvarez refers, and the schools of learning which they founded were the centres from which Islam and the Arabic language were diffused over the country. The majority of these "holy men" settled along the Blue Nile in the direction of Sennar, but over twenty-five of those whose lives are told in the *Ṭabaḳat waḍ Deifullah*⁵ taught in Dongola province. Against their enthusiastic preaching Christianity, without external help, its old foreign contacts having broken down, had nothing to set but the force of inertia or natural conservatism, which, as we have seen, was strong enough to keep alive only what was not specifically attacked by Islam. The only certain relic of Christianity which I can detect in the life of the people today is the use of the sign of the Cross as an apotropaic talisman: I have seen it on the great earthen vessels used for storing grain in Dongola and on gourds in the White Nile province, and in many parts it is painted on the foreheads of newborn infants and on the bodies of children when they are ailing. But has our own medieval religion left many more survivals in English village life?

NOTES ON PLATES.

Pl. xxxii, 1. Three pots found about 1902 by the late Major G. J. Ryan in a grave at Abu Haraz, on the west bank opposite Berber, and now in Khartoum Museum. The grave was of the cave type, the cave being approached by a sloping passage: with the pots were found a small bronze bell with a chain and some bones; the skull, which was preserved, is not negro in type. Of the pots shown, two are wheel-made; on the third, the central one in the photograph, the textile impressions are clear.

2. A selection from a large number of pots which were found accidentally in a grave at Shendi in 1923. A few of the smaller cups and saucers, probably grease pots, were wheel-made, but the greater number of pots were of the large hand-made beer-jar

¹ *P.P.T.S.*, 1895, 103. Their possession of this chapel lends added interest to the painting found by Mr. Griffith in the river-church at Faras (GRIFFITH, *op. cit.*, 80, and Plate lvii).

² *P.P.T.S.*, 1892, I, 373 and 435.

³ *Op. cit.*, II, 123 and 209.

⁴ I quote from BUDGE, *op. cit.*, II, 307, as I have been unable to consult the original.

⁵ An account of these is given by MACMICHAEL, *op. cit.*, II, 217 ff.

(*dullang*) type like the two bigger pots on the photograph, which resemble those found in such numbers by Garstang at Meroe. For a note on the way these pots are made, see *Sudan Notes and Records*, vii, 1924, 20. In Khartoum Museum.

3 and 4. A selection from the pots accidentally found by the Irrigation Department at Wad el-Haddād on the Blue Nile in 1908. The four jars in no. 3 show the same technique though the shapes, in particular the flaring mouths, are peculiar; the three dishes in no. 4 are black in colour and faintly incised; the others are red.

Note. Another grave with pots of the same type has been found at Makwar on the west bank of the river, just below the dam, but I have had no opportunity of seeing these. All these pots come from accidental finds, but they are of the same class as those found at Meroe in graves which had been walled up with rough doors partly made of old Meroitic inscriptions: they are obviously later therefore than the Meroitic period, but are earlier probably than the introduction of Christianity into these parts, as it is unlikely that Christians would bury such an enormous number of beer-jars with the dead. They might be assigned roughly to the fifth to seventh centuries of our era.

Pl. xxxiii, 1. A photograph of Old Dongola church taken from the south-west. The lower storey, which occupies two-thirds of the whole, is built of mud bricks and has a heavy batter: red bricks are used in the upper storey. Photograph taken in 1926.

2. A photograph of a capital just dislodged from its column, which is almost entirely buried in the sand. It is about two miles north of Old Dongola church, and about a mile east of the mouth of the Latti canal. I am indebted to Mrs. Charles Nevile for this photograph.

3. A photograph of the Mek or King of Rashād in the north-east of the Nuba mountains. The king is wearing the cap of royalty, with somewhat attenuated horns: for the rest the king claims Arab blood and dresses accordingly. The photograph was taken in 1925.

Pl. xxxiv, 1. Fragments of pottery found at Wādī Ghazālī, near modern Merowi, and now in the Khartoum Museum. These are some of the finest pieces of Christian pottery that I have found in the Sudan: the largest piece, that with the cross and grapes, measures 11 centimetres in height, the ground colour is a bluish white with a fine glaze, the cross is dark grey, the grapes dark red: the paste of this and of one or two other pieces is very hard and whitish in colour. The best of the dated inscriptions belong to the ninth or tenth century A.D., and the finer pottery might perhaps be referred to the same time.

Pl. xxxiv, 2 and Pl. xxxv, 1 and 2. A series of pots, now in the Khartoum Museum, which were brought into Wādī Ḥālfā by a native of Sarras about the year 1905. He informed me that he had found them in a ruin upon an island near Sarras, called Dīfinarti—the island of the ruin. The ruin in question struck me as very late and the pottery belongs, I think, to the very end of the Christian period; it is coarse, heavy stuff, but still made on the wheel and painted. The ground colours vary from whitish to orange, and the colours of the designs from purple through brown to black. The designs, bands and lozenges filled with lattice patterns, concentric circles, nebule bands, etc., represent the last stage of Nubian pot-painting; the barrel shape is, so far as I know, a new one; the other shapes were common in earlier days.

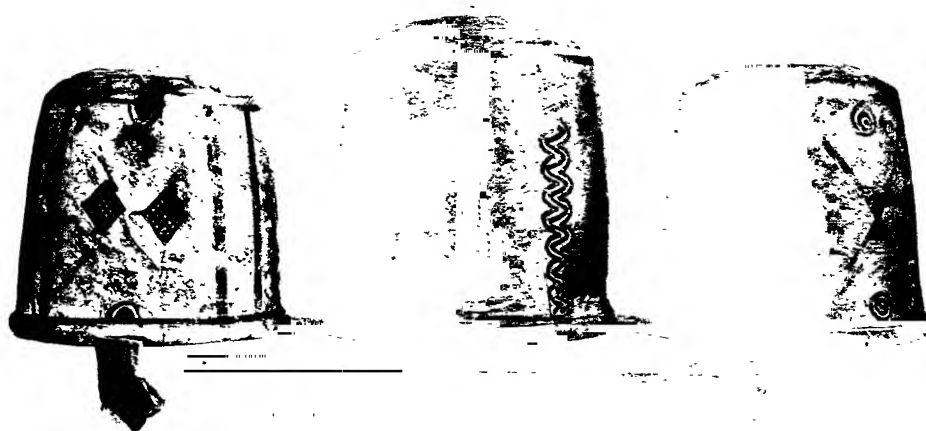


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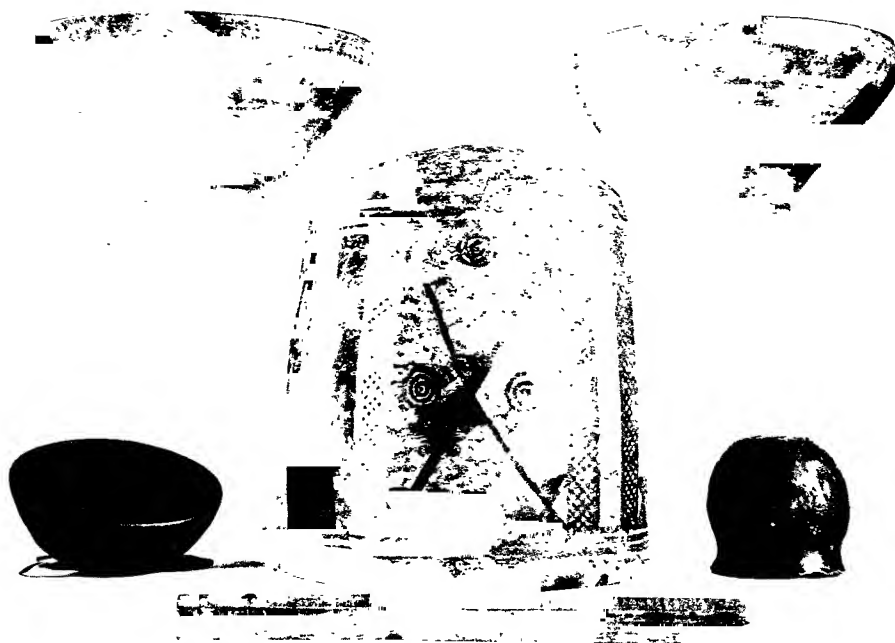
Pottery of the Christian Period from the Soudan.

1. From El Ghazâli. *Scale $\frac{2}{3}$.*

2. From the island of Difinarti. *Scale nearly $\frac{1}{2}$.*



1



2

Pottery of the Christian Period from the island of
Difinarti, Soudan. *Scale nearly $\frac{1}{2}$.*

THE EPIKRISIS RECORD OF AN EPHEBE OF ANTINOOPOLIS FOUND AT KARANIS

BY A. E. R. BOAK

The papyrus which forms the subject of discussion in this paper is one of a large archive of legal documents from the second and third centuries of our era unearthed by the University of Michigan's expedition at Karanis (Kôm Aushîm) in the season 1924-25. It has been assigned temporarily the inventory number P. Mich. 2895. The papyrus is of a grayish-brown colour, and measures 25 by 12·4 cm. There is a margin of 1·8 cm. at the top, one of equal width at the left side, and one of 6·2 cm. at the bottom. The writing, which is in red ink and along the fibres, is in a typical business hand of the late second century and presents no palaeographic difficulties. A double border of overlapping curved lines, the inner row facing outwards and the outer row facing inwards, forms a sort of ornamental frame at the top, bottom, and left side of the document. The papyrus was folded anciently in four folds from left to right, with the result that it is somewhat cracked in the creases of the folds although not sufficiently to make the reading uncertain at any point. The verso contains a short docket in the upper left-hand corner. This is written in black ink in a very small hand which I have not deciphered satisfactorily. The interest of the papyrus lies partly in the link which it provides between Karanis and Antinoopolis, and partly in its contribution to our knowledge of the ephebeia in general.

The text reads as follows :

- 1 Ἐξ ἐπικρίσεως ἐφίβων θ (ἔτους)
θεῶν Ἀνρηλίων Ἀντωνίνου
καὶ Οὐήρου. μετ' ἄλλα,
ὧν οἱ πατέρες φυλῆς Ὀσειραντι-
5 νοίδος. μετ' ἕτερα, Γάϊος Ἰού-
λιος Λονγείνους Γαίου Ἰουλίου
Νίγερος, μητρὸς Πτολλώιδος,
(ἐτών) ἰδ μη(νών) ζ ἡμέ(ρας) α. γνωστῆρες.
Γάϊος Οὐαλέριος Σερῆνος
10 Νερουιάνιος ὁ καὶ Ἑστιαεὺς,
Γάϊος Ἰούλιος Πρίσκος
Παυλείνιος ὁ καὶ Ἰσίδειος,
Λούκιος Ἀκύλιος Πτολεμαῖος
Ὀσειραντινόειος ὁ καὶ Μελειτόριος.
15 ἀντίγραφον ὑπογραφῆς Λουκκε-
ίου Ὀφελλιάνου τοῦ ἐπιστρ(ατήγου)
οὕτως ἐχούσης παρεδέχθη.
2nd h. Ἀμμώνιος βουλευ(τῆς) βι-
βλιοφύλ(αξ) πόλεως σεσημίω-
20 μαι.

Translation: "From the epikrisis of ephebes of the ninth year of the deified Aurelii, Antoninus and Verus. After other (names), those whose fathers are of the tribe Osirantinois; after other (names), Gaius Julius Longinus son of Gaius Julius Niger, his mother being Ptollois, aged fourteen years, seven months, one day. Witnesses: Gaius Valerius Serenus, of the Nervianian tribe and the Hestiaian deme; Gaius Julius Priscus, of the Paulinian tribe and the Isideian deme; Lucius Aquilius Ptolemaius, of the Osirantinoian tribe and the Melitorian deme.

"A copy of the subscription of Luceius Ofellianus, the epistrategus, reading thus: He was enrolled.

"I, Ammonios, a councillor, bibliophylax of the city, have certified it."

For purposes of examination we may divide the document into the following six parts: (1) ll. 1-3, description; (2) ll. 3-5, reference to the tribe Ὀσειραντινοίς; (3) ll. 5-8, the name, parentage, and age of the person whom the document concerns; (4) ll. 8-14, the names of three witnesses to these facts; (5) ll. 15-17, the copy of an original endorsement of the epistrategus; and (6) ll. 18-20, the signature of the official who certifies to the correctness of the document. It will be convenient to examine each of these sections separately.

(1) The document is described as coming from the epikrisis of ephebes of the ninth year of the emperors Marcus Aurelius and Verus, *i.e.*, 168-69 A.D. As such it falls into the same category as the ἀντίγραφον ἐπικρίσεως with its γραφή παιδῶν cited in P. Flor. 57, l. 67 ff. = WILCKEN, *Chrestomathie*, 143, and the extract in BGU. 1084 = *Chrestomathie*, 146. Since the Aurelii are styled θεοί, "gods," the abstract was made presumably after the death of Marcus Aurelius in 180 A.D., *cf.* WILCKEN, *Grundzüge*, 117. As is well known, the admission to the ephebeia followed the satisfactory inspection of the record of the candidates who presented themselves each year from those who had already been admitted to the gymnasium and were called the οἱ ἀπὸ τοῦ γυμνασίου, *cf.* P. Oxy. 1292, 1452 with commentaries, and JOUGUET, *Vie municipale*, 150 ff. This inspection is the ἐπίκρισις ἐφήβων of l. 1.

(2) These lines reveal that the list of the ephebes admitted each year was arranged according to the tribes in which their fathers were registered. Under the heading of each tribe the order of names was probably alphabetical. If the names were grouped by demes under each tribe, it is likely that we should have had some reference to it here. The tribe Ὀσειραντινοίς here mentioned is one of the tribes of Antinoopolis listed by KENYON, *Phyllae and Demes in Graeco-Roman Egypt*, in *Archiv*, II, 70 ff.; JOUGUET, *ibid.*; and KÜHN, *Antinoopolis*, 124. The derivative adjective is Ὀσειραντινόειος, *cf.* l. 14 below and the references just cited. It is the mention of this tribe which shows that although our document comes from Karanis in the Arsinoite it concerns citizens of Antinoopolis in the Antinoopolite nome.

(3) Here we have the names of one of the ephebes of Antinoopolis of the year 168-69 A.D. The name Gaius Julius Longinus indicates a Roman, as does that of his father, Gaius Julius Niger, while his mother's name Πτολλῶις is distinctly Greek. The age of the ephebe was just one day over fourteen years and seven months. This furnishes additional support to the view that the attainment of the fourteenth year was the qualifying age limit for admission to the ephebeia, *cf.* WILCKEN, *Grundzüge*, 141; JOUGUET, *ibid.*; P. Oxy. 1292, note on ll. 19-21.

(4) Here we have the names of the three witnesses to the qualifications of the young ephebe. Like him and his father, they also bear Roman names, but here the important

thing is their citizenship in Antinoopolis which is evidenced by the names of the tribes and demes to which they belong. The three tribal names, Νερουιάνιος, Παυλείνιος, and Ὀσειραντινός, are already well attested. *cf.* the lists referred to in (2). The deme name Ἐσπιαεύς of the tribe Νερουιανής is probably the same as that which appears in BGU. I, 399, 2. as Ἐσπιαῖος, and should be Ἐσπιεύς, SCHUBART, *Archiv*, v, 94: KÜHN, 124. However, the other deme names, Ἰσίδειος of the tribe Παυλεῖνα and Μελειτόριος of the tribe Ὀσειραντινός, are, so far as I am aware, not found elsewhere in the papyri referring to Antinoopolis. Ἰσίδειος, however, appears as a deme name in Alexandria: SCHUBART, *Archiv*, v, 82. Its use in Antinoopolis is easily accounted for, since the emperor Hadrian's sister Paulina, who was deified as *νέα Ἴσις*, was the patron deity of the Paulina tribe: WEBER, *Untersuchungen zur Geschichte des Kaiser Hadrians*, 252-53. I am unable to suggest any explanation of the name Μελειτόριος, although it must be connected with Osiris, the patron deity of the Osirantinois tribe, with whom Antinous was identified: WEBER, *op. cit.*, 250. The Roman citizenship of the ephebe, his father, and the three witnesses, is readily explained. All citizens of Antinoopolis were qualified for admission to the Roman legions in Egypt and would consequently receive Roman citizenship upon their enlistment; *cf.* KÜHN, *Antinoopolis*, 162. In addition, a large number of the veterans discharged under Antoninus Pius became citizens of this town and were called οὐετρανοὶ Ἀντινοεῖς; KÜHN, *op. cit.*, 82-3. Thus a large number of the Antinoites probably were Romans by 168/69 A.D. However, the occurrence of the name Gaius Julius in three out of the five cases suggests that we may have to do with descendants of persons who had received Roman citizenship in the Augustan period, either as legionaries, veterans or freedmen.

(5) Lucceius Ofellianus is already known to have been epistrategus of the Heptanomia, which included the Antinoopolite nome, in 166 A.D.; V. MARTIN, *Les épistratèges*, 182. Our reference extends his term to 168/69, so that he probably functioned until succeeded by Aemilius Capitolinus, who was in office shortly after 26 November, 169: MARTIN, 183. It seems to me that the word *παρεδέχθη*, cited from the endorsement of the epistrategus, shows that this official conducted the final *ἐπίκρισις* of the ephebes in the metropoleis. The editors of P. Oxy. 1202 (217 A.D.) feel that the fact that this petition, complaining of the omission of a boy's name from the list of candidates for the ephebeia, was addressed to the deputy epistrategus does not imply that the epistrategus conducted the *εἰσκρισις* (*ἐπίκρισις*). However, the word *παραδέχομαι* is the technical expression for enrolment in the ephebeia, *cf.* P. Flor. 79, 9: Oxy. 477, 24: PREISIGKE, *Wörterbuch*. And since the subscription of the epistrategus is cited as warrant for the enrolment, it is hard to avoid the conclusion that his *παρεδέχθη* (possibly *παραδεχθήτω* in the original) rendered the final judgment in the examination. For the ephebes of Alexandria, however, the *ἐπίκρισις* was probably conducted by the Prefect of Egypt, as Wilcken suggests, *Grundzüge*, 142.

(6) The signature of the βιβλιοφύλαξ is additional evidence that all epikrisis records were kept in the δημοσία βιβλιοθήκη under the supervision of these officials, who issued and certified all abstracts made from them; *cf.* WILCKEN, *op. cit.*, 201. Ammonios describes himself as βουλευτής, *i.e.* a member of the βουλή, an institution which Antinoopolis possessed from the date of its foundation in 130 A.D. The πόλις referred to can only be Antinoopolis, so that the document before us is an abstract from the δημοσία βιβλιοθήκη of that metropolis.

The presence at Karanis of this extract from the epikrisis register of Antinoopolis need occasion no surprise. The Fayyûm supplied many of the colonists for Antinoopolis, and in fact the majority of the known οὐετρανοὶ Ἀντινοεῖς have property in the Arsinoite nome;

cf. KÜHN, *op. cit.*, 83 ff. BGU. II, 148 (c. 150 A.D.) offers the example of an Antinoite veteran who inherited the property of his father, a landholder of Karanis, *cf.* KÜHN, *ibid.* In all probability further examination of the Karanis papyri at Michigan will show additional instances of Ἀντινοεῖς who are connected with this town in the Fayyûm.

It seems justifiable to conclude that Gaius Julius Longinus himself lived at Karanis and had this certificate of his ephebeia placed in the local record office as a guarantee of the rights and immunities to which his station entitled him.

ON TWO MUMMIES FORMERLY BELONGING TO THE DUKE OF SUTHERLAND

BY WARREN R. DAWSON

With Plate xxxvi

On the 15th July, 1875, the late Dr. Samuel Birch unrolled a mummy at Stafford House belonging to the [third] Duke of Sutherland. This mummy had been presented to the Duke by General (later Sir Edward) Stanton, when British Consul in Egypt. Immediately after the unrolling, the Duke of Sutherland presented the mummy to the Museum of the Royal College of Surgeons. As the soft parts were in poor condition, the Conservator, the late Sir William Flower, had the bones cleaned and articulated, and the mounted skeleton was duly installed in the osteological series in the museum. In November, 1875, Flower contributed an account of the skeleton to the Society of Biblical Archaeology¹, and at the same time Joseph Bonomi made some observations upon it². A year later, Birch published an account of the mummy and of the cartonage in which it was contained. The greater part of this account is devoted to a description of the case and its decoration; concerning the mummy itself, Birch says³:

The mummy was enveloped in a cartonage, or linen covering, covered with stucco and laced up like stays behind. The original cord had been replaced by modern string, but it was otherwise intact, and did not appear to have been previously opened. The period of the mummy was apparently about the XXVIIIth Dynasty, if not even later, as the paintings were far inferior to those of an earlier date, and the hieroglyphs confused and illegible, the mummy by no means belonging to a time when the process of embalming was in great perfection. The body was with some difficulty extracted from the cartonage, and found to be swathed in bandages of rather a dark colour, and by no means so full and numerous as is usual in the later class of mummies, although packed with some care. No inscription occurred on them, nor was any amulet or other object found to give a clue to the embalmed person, the only object discovered being some white leather placed about the back of the head, either a hypocephalus or else a scull-cap, *nammu*, but it was too far gone to determine its character and use. The body was very thin, the skin excessively brittle, the hands crossed over the pubes, giving the usual arrangement of a female also: a later examination of the skeleton has led to the conclusion that it was the mummy of an old man. It had not been prepared by the bituminical process, but resembled the later class of mummies as were made as late as the Roman Empire. It did not, however, exhibit any given Egyptian characteristics, and was evidently an Egyptian, although not of high rank or wealth, as evinced by the absence of amulets and other paraphernalia of the upper classes. It was said to have come from Thebes, probably from some of the recently discovered tombs in that locality.

To this account of the mummy we can add some further particulars from the description of it in the museum catalogue⁴.

The mummy was prepared without bitumen, and the ethmoid bones were intact, showing that the brain had not been extracted through the nostrils in the manner described by Herodotus, and as is generally the case with mummies from Thebes. When divested of their wrappings, the soft parts of the body were all dry and perfectly friable, separating from the bones and crumbling at a touch. The hair that remained on the scalp was fine, soft and wavy, probably originally white or grey, but now stained to a yellowish-brown

¹ *Transactions*, iv (1876), 253.

² *Ibid.*, 251.

³ *Op. cit.*, v (1877), 122.

⁴ Royal College of Surgeons Museum, *Osteological Catalogue*, Part I, 2nd ed. 1907, 131-32.

colour, much the same hue, in fact, as that of the dried flesh and bones and the cloths in which they were enveloped. The bones were very light and brittle, having lost much of their animal matter, and could only be made firm enough to bear the wires necessary for articulation by impregnation with gelatine. The skeleton is that of a man of short stature and considerably advanced in age.

Miss Tildesley, of the Royal College of Surgeons, has succeeded in tracing the present whereabouts of the cartonnage of this mummy, and also its wooden coffin, which Birch does not mention¹. On archaeological evidence, the coffin must be assigned to the Twenty-third Dynasty, or possibly to the end of the Twenty-second, but the mummy it contained was certainly not that of its original occupant, nor can I agree with Birch that it is as late as the Twenty-eighth Dynasty. The mummy was not prepared in accordance with the technique which was in vogue between the end of the Twenty-second and the beginning of the Twenty-sixth Dynasty. During that period, the brain was always removed, and resin was used in the preparation of the body, which rendered it firm and durable². Although the elaborate technique introduced in the Twenty-first Dynasty, which involved the packing of the limbs, had fallen into abeyance, as had also the custom of replacing the viscera in the body-cavity, the condition of mummies belonging to the period between the Twenty-third and Twenty-sixth Dynasties is usually very good, and shows evidence of care in their preparation. In the case of Birch's mummy, it is expressly stated in the account above quoted that the brain had not been removed, and that no bitumen (resin) had been used in the preparation of the body. These facts, taken in conjunction with the relative paucity of bandages, and the friable condition of the flesh and bones, make it appear very probable that the Arabs who discovered the coffin had taken away the well-made mummy which had originally occupied the cases, and had substituted for it an Eleventh Dynasty mummy, for there are many Middle Kingdom tombs in the vicinity of Dêr el-Bahârî, from whence, as we shall presently see, it is most likely that the coffin was obtained. Moreover, such fraudulent substitutions by Arab dealers in antiquities are common. Such scanty details as we have of the mummy accord entirely with the state of affairs revealed by the Theban mummies of the early Middle Kingdom and do not in the least tally with the methods in use during the period indicated by the coffin. In this connection, Birch's statement that the original lacing of the cartonnage had been replaced by modern string is very significant.

We will revert to a consideration of the evidence afforded by the coffin, after having described the second mummy.

This second mummy was presented to the British Museum after the death of the third Duke of Sutherland (died 1892), by his successor, in 1893. It was contained in a wooden case, to which reference will be made later. The name on this coffin is 'Ankhpekhrod, the son of 'Ankhefenkhons, a prophet of Mont (Menthu), Lord of Thebes. This coffin is briefly described by Sir Ernest Budge in the official guide-book, and it bears the number 24.958³. It is stated that:

The mummy found in this coffin was unrolled by the late Dr. Birch, at Stafford House, on 15th July 1875: but it was probably not that of its original occupant, for, judging by the absence of ornaments, it must have been a poor person, or one of inferior rank. The mummy is exhibited...in the Third Egyptian Room....Presented by the Duke of Sutherland, K.G., 1893.

¹ See Miss Tildesley's note, below.

² A detailed description of a mummy of this period will shortly appear in Vol. 61 of the *Proceedings of the Society of Antiquaries of Scotland*.

³ *Guide to the First, Second and Third Egyptian Rooms*, 3rd ed., 1924, 93.

On referring to the appropriate place in the guide-book (p. 145), I was surprised to see that the mummy is there described definitely as that of 'Ankhpekhrod, the son of 'Ankhefenkhons. This statement is at variance with that quoted above, in which it was suggested that the mummy was probably *not* that of the original occupant of the coffin.

By the kind permission of Dr. H. R. Hall, I was recently allowed to make a thorough examination of this mummy, and Dr. Hall was kind enough to have it removed to a private room where every facility was given to me. On removing the coverings, I found myself at once in agreement with the suggestion that the body was not that of 'Ankhpekhrod, for I found it to be that of a woman. It was not unrolled by Dr. Birch but by Sir Richard Owen, and it is certainly not the mummy described by Birch, which, as we have seen, was that of a man, and which was presented in 1875 to the Royal College of Surgeons, whereas the present mummy was not given to the British Museum until 1893.

I cannot agree that the body was that of a poor person, or one of inferior rank, as the mummy has been very carefully prepared. At the period with which we are now concerned, the absence of ornaments from the mummies of priests or priestesses is not an indication of poverty. The bodies of the priests and priestesses of Amūn of the Twenty-first and Twenty-second Dynasties from Dēr el-Baḥarī had no jewellery: they were provided with nothing but a heart-scarab and a uniform set of small amulets of no value, tied round the neck by a string. After the Twenty-second Dynasty, the amulets maintained their uniform character, and were laid under the outermost wrappings, according to an arrangement which in course of time became schematic and conventionalized¹.

The mummy (No. 24,957) is that of an elderly woman of short stature (height 4 ft. 11½ in.) lying in a fully extended position, with the arms pressed against the sides of the body: the hands, with their fingers extended, being placed with their palmar surfaces resting on the lateral aspects of the thighs. The head is covered with hair of a light brown colour, cut short like a man's, and revealing a bald patch, about two inches across, on the crown of the head. The hair was probably grey, and has been stained to its present colour by the embalming materials. The eyelids are not completely closed, and beneath them is no packing material, the eyes having merely shrunk, and collapsed into the orbits. The jaws are closed, but the lips do not quite meet, and reveal the much-worn lower incisor teeth. The right corner of the mouth is depressed, but this is probably due to the pressure of the head bandages, and does not indicate any pathological condition such as facial paralysis. The ears are small, and well separated from the head, but their lobes do not appear to have been pierced. The brain has been removed through the left nostril, the ethmoid being perforated, but the septum is undamaged, and there is no packing in the fossae. By inserting a probe, I was able to ascertain that the greater part of the cranial cavity is empty, only a small quantity of packing material having been inserted, and this was lying in the occipital region.

The thorax and the abdominal cavity had been emptied of their organs through a vertical embalming-incision, 12 cm. in length, in the left lumbar region, the top of it being on a level with the navel. No attempt had been made to close the wound, which was elliptical in shape and gaped to the extent of 8 cm. The lower part of the pelvic cavity was filled with a hard mass, consisting of a thick paste, now solidified, composed

¹ See *Journal*, I, Pl. xxxii, Fig. 2; PETRIE, *Amulets*, Pls. 1-liv; RHIND, *Thebes, its Tombs and their Tenants*, Pl. vii.

of resin, linen and coarse wood-dust. The upper part of the cavity was devoid of packing, as was also the thorax. The embalming-wound was not wide enough to permit of a complete exploration of the body-cavity: but a wooden rod, inserted in the direction of the neck, encountered a solid body lying on the spine beneath the sternum, about as large as a hen's egg. This mass was, most probably, the shrunken remains of the heart, which, following the usual custom, was not removed by the embalmers, but left in the body attached to the great vessels. The breasts must have been full, as is indicated by the deep wrinkling of the skin in their area, but the nipples are so shrunken as to be scarcely perceptible. The pudenda has been pressed inwards and smeared with a thick coating of resin which has rendered them inconspicuous. In removing the lower pelvic viscera, the embalmer cut round the anus, which now appears as an elliptical opening about 5 x 3 cm. with clean-cut edges. This opening has been plugged by a pad of linen soaked in resin.

The thighs are deeply wrinkled, but no packing material has been inserted in them. The hands have been treated in the usual way: that is to say, the epidermis has been cut round each finger so as to form a thimble of skin to support the nail. Threads are wound round each digit to hold these thimbles in position. The nails are long and untrimmed. The feet have been treated with the same end in view as in the case of the hands, *i.e.* the preservation of the nails: but instead of cutting the skin of each toe, the skin of the whole of the anterior part of the foot has been cut so as to leave a kind of glove of epidermis ending about half way up the instep (Fig. 1). Except on the fingers and toes, and on the head, the whole of the epidermis has been removed from the body by maceration.

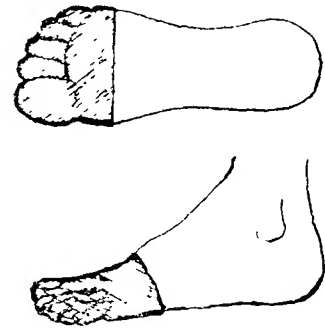


Fig. 1.

The whole surface of the body is of a reddish-brown colour, liquid resin having been carefully applied with a brush, and not poured over in a molten condition, as was the custom in Ptolemaic times. The resin used was of a very good quality, and has not caked into solid masses. The skin is semi-flexible and resembles parchment. On the anterior surface of the abdomen, lying obliquely, are the remains of an oblong linen package, which has adhered to the body-wall and has subsequently been torn off. This probably contained the cuttings of the hair, or the shed epidermis of the body: these are frequently found wrapped in linen and placed in this position on mummies. The mummy has been very carefully treated throughout, and is a good specimen of the technique of its period. From the details of its treatment, I should place it not later than the early part of the Twenty-sixth Dynasty, nor can it be very much earlier. Whether the mummy of this woman was put into the coffin in which it was found by the Egyptians of antiquity, or whether it was the act of their modern successors, we have no means of knowing, but in any case the mummy and the coffin are contemporary, or nearly so.

We must now revert to a consideration of the coffins in which these two mummies were found. The name and titles on the second one (that of Ankhpekhrod) associate it quite definitely with the series of coffins and mummies of the priests of Mont discovered by Mariette at Dér el-Baharî in 1858. This find comprised a large series of wooden sarcophagi and coffins, all belonging to one family, and covering about ten generations, from the end of the Twenty-second Dynasty to the early part of the Twenty-sixth. The

genealogy has been worked out by Baillet¹ and more fully by Moret². There were three persons bearing the name of 'Ankhefenkhons in this series, and 'Ankhpekhrod, whose coffin contained the second of the Duke of Sutherland's mummies, was most probably the son of the third of the name, who lived in the time of the first king of the Twenty-sixth Dynasty.

It is one of the melancholy instances of the lax methods of the earlier excavators that no adequate records of Mariette's discovery were kept. He found his great series of coffins and mummies in the inner chambers of the great temple of Dêr el-Baharî, which had fallen into ruin and was used as a *cache* to hide the mummies of the priestly family to which reference has been made. Many similar *caches* of mummies have been found in the Dêr el-Baharî district: notably those of 1881 containing the royal mummies, of 1893, containing a large series of mummies of the priesthood of Amûn of the Twenty-first and Twenty-second Dynasties, and of the last ten years, discovered by the expedition of the Metropolitan Museum of New York. It is quite evident from the accounts of the early diggers, such as Salt, d'Athanasy and Rhind, that many other such finds were made, the contents of which have now passed into various museums. Brugsch attributed to Maunier the discovery of sixty mummies in nine shafts at Dêr el-Baharî, but it seems that he was confused, and had in mind Mariette's haul of 1858. Wiedemann, however, who repeats Brugsch's attribution to Maunier, states that some of the mummies were not taken to the Bulaq Museum, but were left at Luxor³. The whole find purported to have been moved to the Museum, although some of the coffins were taken to the Paris Exhibition of 1867, but out of the original number, said to be sixty, the coffins of only thirty-two persons now exist in the Cairo Museum. Most of the mummies had each a rectangular sarcophagus containing two anthropoid coffins, some had a sarcophagus and one coffin, some two coffins and no sarcophagus, and others again, a single coffin. None of these objects was entered in the *Journal d'entrée* of the Museum, and many of them, owing to lack of exhibition room, were stored in the *magasins* at Bulaq. Some of them have disappeared from this store-house, others probably never got there, but were purloined by the natives in transit. In any case it is abundantly clear that the find was exploited by the natives, and many of the coffins found their way into private hands. All the mummies seem to have disappeared. The Cairo collection, large as it is, is now much reduced, and consists of forty-one sarcophagi and thirty-one coffins, representing the equipment of thirty-two persons⁴.

The coffins of 'Ankhpekhrod were evidently amongst those stolen by the Arabs. One of the coffins was sold containing the mummy of its rightful inmate, the other was evidently traded off to another buyer, and in it was put a mummy which had been taken from another coffin, perhaps one of those which reached the Museum empty. Hence the mummy which has been described in detail above is most likely that of one of the priestesses whose coffin now forms part of the Cairo collection.

It is very likely that the other (which contained Birch's mummy) has a similar history. It is considerably earlier in date than the last mentioned, but not too early to belong to Mariette's find. It is a simple coffin of the type which was in vogue during the Twenty-second and Twenty-third Dynasties, and which preceded in date the

¹ *Rec. de Trav.*, XVIII (1896), 187 ff.

² *Sarcophages de l'Époque Bubastite à l'Époque Sarte*, 1913 (table following the Introduction).

³ BRUGSCH, *Zeitschrift f. d. Morgenl. Gesellschaft*, XIV (1860), 8; WIEDEMANN, *Ägyptische Geschichte* (1884), 332; GAUTHIER, *Cercueils anthropoïdes des prêtres de Montou*, VII.

⁴ These objects have been described *in extenso* by Moret and Gauthier, *op. cit. supra*.

"pedestal" coffins which came into use in the Twenty-fifth Dynasty, of which the Cairo series has many examples. It is possible, however, that it came from another deposit in the same district, and in order to make it more saleable it was provided with a mummy from elsewhere, probably, as above suggested, from an Eleventh Dynasty tomb. Birch read the name on the cartonage as Nebset, but that on the coffin is clearly Nesmut, daughter of Amenkha. It therefore seems that the body of one person, the cartonage of a second, and the coffin of a third have been combined, probably by an Arab dealer, to make up one "lot."

SUPPLEMENTARY NOTE

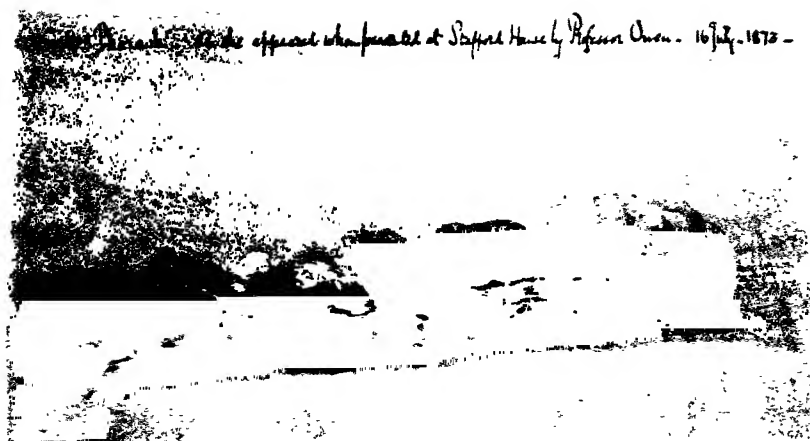
By M. L. TILDESLEY

(1) *Mummy given to the Royal College of Surgeons*

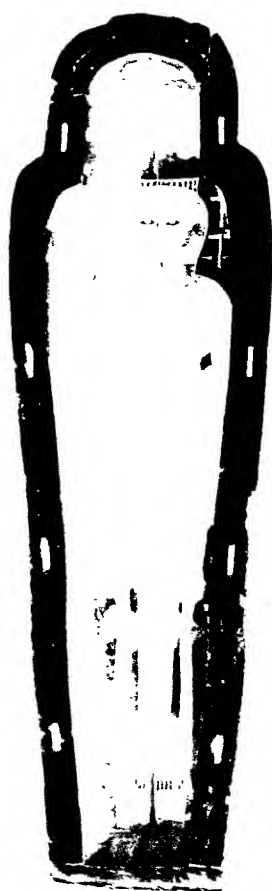
In the course of preparing a new catalogue of the Human Osteological Collection in the Museum of the Royal College of Surgeons of England, I was working in 1925 upon the Egyptian section, and wished to ascertain whether a modern verdict would confirm the date (Twenty-eighth Dynasty) assigned fifty years earlier to the mummy unwrapped by Dr. Samuel Birch at Stafford House on July 15, 1875, and presented that same year by the then Duke of Sutherland to this Museum. As the mummy had been reduced to a skeleton and articulated on its reception here, it was no longer possible to examine afresh the method of mummification in the light of more recent research; so an enquiry was addressed to His Grace the present Duke of Sutherland, in the hope that the late Duke his grandfather might have retained the casing while giving away its contents, and that the casing might serve to date the mummy. This hope was fulfilled to the extent that not only the cartonage casing but also the wooden coffin were found to be in the museum of Dunrobin Castle, and permission was very kindly given for these objects to be examined and photographed. I have to thank the generous kindness of Professor Arthur Robinson, of Edinburgh University, for obtaining the photographs herewith reproduced (Pl. xxxvi, figs. 2 and 3). Professor Sir Flinders Petrie was good enough to examine these records: and the date to which he assigned the coffin and casing was "late Twenty-third Dynasty, about 750 B.C." As he pointed out, however, the mummy found in the case was by no means necessarily its original occupant, as funeral furniture was an article of commerce second-hand.

In cases where a fresh mummy was enclosed in a second-hand coffin, the date of the latter gives at least a limiting date to its contents: they cannot be of an earlier period than the coffin. In the case before us, however, the method of mummification is hardly consistent with a date subsequent to the Twenty-third Dynasty, and this fact, together with the use of modern string to lace the cartonage, make it pretty clear, as Mr. Dawson points out, that it was the modern Arab who effected the change in occupancy of the coffin.

We still have, therefore, to fall back upon the descriptions of the method of mummification left by Dr. Birch and Prof. Sir W. H. Flower for the main evidence in dating the human remains: and it is on the basis of these combined with other clues that the date "Middle Kingdom (Eleventh Dynasty?)" is arrived at, for which our thanks are due to Mr. Warren Dawson.



I



2



3

1. Water-colour sketch of the mummy unrolled by Owen in 1873.
2, 3. Coffin and cartonnage of the mummy unrolled by Birch in 1875.

(2) *Mummy at the British Museum*

In the above paper, Mr. Dawson points out the error made by Sir Ernest Budge in identifying the mummy presented to the British Museum by the Duke of Sutherland in 1893 with that unrolled at Stafford House on July 15, 1875. A water-colour sketch preserved at Dunrobin Castle, and lent to me for reproduction by kind permission of His Grace the Duke of Sutherland, serves to identify the mummy in question. This sketch (Pl. xxxvi, fig. 1) depicts a mummy partly unwrapped, and though very rough and imperfect in its execution it shows clearly the left arm extended with palm pressed against the thigh: the long and gaping embalming-incision in the left side, the top of it level with the navel; the hair cut short; and, by its inscription, the fact that this was a woman. All these points correspond with Mr. Dawson's description of the mummy presented by the Duke of Sutherland to the British Museum, and the legend appearing above the figure supplies the details as to when and by whom it was unwrapped. This reads: "*Mrs. Pharaoh,*" as she appeared when presented at Stafford House by Professor Owen, 16 July, 1873. [The appearance of the mummy as shown in the sketch is exactly in accordance with that of the original specimen in the British Museum.—W. R. D.]

COPPER IN ANCIENT EGYPT

By A. LUCAS

In view of the statements that have been made that copper was probably not discovered in Egypt, but in Asia (1, 2)¹, and that the Egyptian copper mines could not have supplied the amount of that metal used in the country anciently (2, 3), it seems desirable to summarize what is known about the Egyptian copper deposits and their early working. Copper ore occurs within the geographical limits of modern Egypt in two different localities, namely in Sinai and in the eastern desert. The amount, however, is not sufficiently large to warrant mining at the present day, since copper may be obtained in much greater quantity and in more easily accessible places elsewhere.

The evidence for ancient copper-mining in Egypt is twofold, first, the existence of ancient mines with ruins of mining settlements and mining debris, and second, inscriptions in the neighbourhood of mines, left by mining expeditions.

Sinai.

Ancient workings, some of which are of considerable size, and which admittedly were either for copper ore or for turquoise, exist at Maghârah and at Serâbit el-Khâdim, both of which are situated in the south-west of the peninsula (2, 4, 5, 6).

That some of these workings were not for copper ore, but for turquoise (which was much employed for jewellery in both the Old and Middle Kingdoms and even as early as the Predynastic Period), there can be little doubt, since at both places turquoise is still found, and at Maghârah turquoise-mining is carried on by the local bedouin at the present day, the main workings extending for about two kilometres on the west side of the valley (2 *a*, 4, 5, 6, 7). At Serâbit el-Khâdim, although turquoise occurs, it is only found at the present time in small quantity and is not now worked (4, 5, 6, 7).

In addition to turquoise, however, copper ore also was undoubtedly mined anciently at Maghârah, since ruins of mining settlements exist, dating principally from the Old Kingdom, but also from the Middle Kingdom, in which have been found copper ore, remains of furnaces, copper slag, broken crucibles, part of an ingot mould and a mould for casting the blades of weapons (2 *a*, 4).

At Serâbit el-Khâdim the proof of ancient copper-mining is less evident as the workings have never been carefully examined from this point of view, but copper ore occurs in the immediate neighbourhood and a crucible for melting copper has been found in the temple (4).

The copper ore mined anciently, both at Maghârah and at Serâbit el-Khâdim, was largely the green carbonate (malachite), with a little blue carbonate (azurite) and a little silicate (chrysocolla), only small quantities of any of which now remain (2 *a*, 5, 6).

The inscriptions left by the mining expeditions were² at Maghârah, in the valley and mines near Serâbit el-Khâdim, in the temple of Serâbit el-Khâdim and the approach to it, and in the Wâdî Nasb (8, 9).

¹ The figures in brackets refer to the works quoted in the Bibliography at the end of the article.

² The word is employed in the past tense as many of the inscriptions have either been destroyed or removed.

At Maghârah there were 45 records, consisting of 36 inscriptions on the rocks, 8 graffiti and 1 stela (whether free-standing or not is not stated). These began in the First Dynasty (1 inscription) and were continued in the Third Dynasty (3 inscriptions). Fourth Dynasty (3 inscriptions). Fifth Dynasty (8 inscriptions). Sixth Dynasty (2 inscriptions). Twelfth Dynasty (13 inscriptions). Eighteenth Dynasty (1 inscription) and Nineteenth Dynasty (1 inscription). There were also 5 inscriptions of the Old Kingdom and 8 of the Middle Kingdom that cannot be assigned to any particular dynasty.

In the valley and mines near Serâbî el-Khâdim there were 15 records, consisting of 13 inscriptions on the rocks and 2 stelae (whether free-standing or not is not stated). These were of the Twelfth Dynasty (10 inscriptions) and Eighteenth Dynasty (3 inscriptions), with 1 of the Middle Kingdom of which the dynasty cannot be recognized and 1 of doubtful date.

In the temple and its approach there were 288 inscriptions, principally on loose blocks of stone, statuettes, free-standing stelae and other objects, but including a number of inscriptions on walls and pillars. These consisted of one inscription with the name of Sneferu (which is almost certainly of later date than the reign of this pharaoh and is probably not earlier than the Middle Kingdom) together with the following-named: Twelfth Dynasty (72 inscriptions). Eighteenth Dynasty (75 certain inscriptions and 11 less certain). Nineteenth Dynasty (30 inscriptions) and Twentieth Dynasty (22 inscriptions), also 38 certain inscriptions and 4 less certain of the Middle Kingdom, 18 certain inscriptions and 2 less certain of the Nineteenth to Twentieth Dynasties and 15 inscriptions of which the dates were altogether doubtful.

In the Wâdî Nasb there was one inscription on the rock of the Twelfth Dynasty.

The inscriptions in those cases where there was any reference to the nature of the activities undertaken, frequently made mention of malachite¹ and once of copper, but they were very unsatisfactory for use as a history of Egyptian mining. Thus the earlier ones (First, Third, Fourth and beginning of Fifth Dynasties respectively) merely recorded the names and titles of the pharaohs, then references to the leaders and officers of the expeditions were included (Fifth Dynasty) and at later dates statements of the objects of the expeditions. Although there can be little doubt that all the expeditions were for the purpose of mining either copper ore or turquoise, there is no direct proof of this from the inscriptions themselves in the case of the earlier ones, which might have been merely records of punitive expeditions, though they are believed to have been more.

In addition to the workings at Maghârah and at Serâbî el-Khâdim, already mentioned, ancient workings for copper ore exist at the following-named places, all in the neighbourhood of Serâbî el-Khâdim:

(a) Gebel (Mount) Umm Rinna, situated N.N.W. of Serâbî el-Khâdim, where there is an excavation some 20 metres wide, 1 to 2 metres high and about 50 metres long. The ore extracted was malachite, traces of which still remain (5).

(b) Wâdî (Valley) Malha. These workings are close to Gebel Umm Rinna, Wâdî Malha draining the eastern flank of the mountain. The ore mined was malachite, small quantities of which still exist (6).

(c) Wâdî (Valley) Khârig, called Wâdî Halliq by Barron. This is situated to the west of the northern portion of Wâdî Nasb. Here there is an excavation about 100 metres long, 10 metres wide and 2 metres in average height. The ore extracted was malachite, which has been practically exhausted (5).

¹ It is suggested that the translation should read turquoise instead of malachite.

In addition to the old workings there are also a number of slag heaps resulting from the smelting operations carried out anciently. The largest of these heaps is in Wâdî Nasb (called Wâdî Nasib by Ball), which is situated north-west of Serâbiṭ el-Khâdim (4, 5, 6, 10). In this wâdî, as already mentioned, there is an inscription of the Twelfth Dynasty. In continuation of this heap there is much scattered slag all the way up the path to the stela of Amenemmes IV (4).

Similar, but smaller, ancient slag heaps exist at the south side of Sêḥ Baba (the lower part of Wâdî Nasb), which is situated to the south-west of Serâbiṭ el-Khâdim (4).

Another ancient slag heap is at Gebel (Mount) Safariat, south of Gebel Hebrân (6).

In the south-east of the peninsula ancient workings for copper ore and ancient slag heaps exist in two places, namely:

(a) Near the plain of Senned. The working here is in the nature of a dyke which has been excavated for nearly two miles and is "exceedingly rich" in the blue carbonate (azurite) (11).

(b) In the hills west of the Nebk-Sherm plain. Some of the ore is malachite and possibly this alone was worked anciently: a deposit of chrysocolla has however been found by modern prospectors at Wâdî Samra (sometimes called Wâdî Samara) (11).

Eastern Desert.

Copper ore exists in several localities in the eastern desert, namely:

(a) In Wâdî (Valley) 'Araba, which is situated almost due east of Beni Suef (about Lat. 29° N.) near the Gulf of Suez. The ore is chrysocolla and the amount is only small; there is no evidence that it was mined anciently (12).

(b) At Gebel (Mount) Dara (approx. Lat. 28° N.; Long. 33° E.), where there are ancient workings. The ore is chrysocolla (12, 13).

(c) At Gebel (Mount) Atawi, which is situated a little south of the latitude of Luxor, but nearer to the Red Sea than to the Nile. There are ancient workings, but the nature of the ore is not stated (12).

(d) In the Dungash gold mine, which is situated east of Edfu (approx. Lat. $24^{\circ} 50'$ N., Long. $33^{\circ} 45'$ E.). The nature of the ore is not stated, nor whether it was worked anciently; the amount of copper ore, however, is probably very small (12).

(e) Among the low hills south of Wâdî (Valley) Gemâl (Lat. $24^{\circ} 35'$ N., Long. $34^{\circ} 50'$ E.). The ore is malachite, but it is not stated whether there are ancient workings (12, 14).

(f) At Hamish (Lat. $24^{\circ} 32'$ N., Long. slightly E. of 34°). There are old workings with three main shafts. The ore is chalcopyrite (sulphide of copper and iron). The sides of one shaft are incrustated with blue copper compounds formed from the pyrites (15).

(g) At Hamamid, which is situated due east of Khattara (approx. Lat. $24^{\circ} 12'$ N., Long. $34^{\circ} 29'$ E.). There are extensive ancient workings with several shafts, one of which is about 80 feet deep. The ore is malachite (7, 18).

(h) At Abu Seyâl (sometimes wrongly called Absciel) in Lat. $22^{\circ} 47'$ N. (12, 14, 16, 17). Wells reported that the ore occurred in the form of pyrrhotite (iron pyrites) associated with copper pyrites (copper sulphide), but although there may well be copper pyrites at some distance below the surface, the ore exposed is chrysocolla (18). The mine was worked "extensively" in ancient times (17). Some at least of the ore was smelted at the mine as there are remains of ancient furnaces and slag (18).

(i) Isolated specimens of malachite have been found in two localities, namely in a valley west of the Sufr range of hills (west of Jemsa) and at Wâdî (Valley) Sibrît in Lat. $24^{\circ} 43' N.$, Long. $33^{\circ} 58' E.$ (12, 14).

In addition to the various ore deposits and ancient workings a large ancient slag heap resulting from the smelting of copper ore exists at Kubbân on the east bank of the Nile opposite Dakka (16, 19) (Lat. $23^{\circ} 10' N.$). The origin of the ore smelted is not certain, though it is often assumed to have been that from the Abu Seyâl mine. As already stated, however, part at least of the Abu Seyâl ore was smelted at the mine itself as the remains of ancient furnaces and slag attest.

Amount of ore extracted.

Unfortunately the examination of the ancient workings does not show, even approximately, the amount of ore extracted, and any estimate based on the size of the workings would be fallacious, as the ore occurs in veins which have been largely worked out. All that can be stated is that the quantity of ore originally present was probably not large and that it was so precious that the poorest seams have been followed up and exhausted.

Unfortunately, too, very few analyses of Egyptian copper ores have been made and the only ones that can be traced are the following:

Sinai. (a) South-western mines. This ore yields from 5 to 15 per cent. of copper according to Rickard (10) and up to 18 per cent. according to Rüppell (20). (b) South-eastern mines. A specimen of ore analysed by Professor Desch gave 3 per cent. of copper (21).

Eastern Desert. (a) From Wâdî Araba two specimens analysed by the Chemical Department, Cairo, gave 36 and 49 per cent. of copper respectively (22). (b) It is stated that the Abu Seyâl ore yields on an average well over 3 per cent. of copper and that in places it is very rich and may yield as much as 20 per cent. (17).

It may be mentioned that, separated from the extraneous matter with which it is found associated, malachite yields theoretically 57 per cent. of copper, azurite 55 per cent., chrysocolla 36 per cent. and chalcopyrite 35 per cent.

Some evidence for the amount of ore dealt with in certain districts may be obtained from the dimensions of the ancient slag heaps, but the data are very incomplete and even if it be assumed that all the heaps still exist and are known, which is almost certainly not the case, many of them have neither been measured nor examined.

The various slag heaps that are known have already been mentioned, but the only ones of which any particulars are given are those of Wâdî Nasb, Sêh Baba and Kubbân, which may now be considered.

Slag heap at Wâdî Nasb. The dimensions of this as given by Petrie are 500 ft. long, 300 ft. wide and 6 or 8 ft. high (4). Petrie, however, quotes Bauerman (an English geologist who explored the district in 1868) for very different dimensions, namely, 250 yds. by 200 yds. (4), while another writer gives Bauerman's dimensions as being 350 yds. by 250 yds. by 8 or 10 ft. (23). Bauerman's own statement, however, is that the slag forms a roughly elliptical heap, about 350 yds. long and 200 yds. in breadth, the depth being very variable and probably not more than 8 to 10 ft. at the most, but that over the greater part of the area the slag forms only a thin covering to the rock (24).

Petrie's estimate for the amount of slag present is 100,000 tons, but Rickard, taking Bauerman's measurements, makes the amount only 50,000 tons (10), which is much too small for the dimensions given.

In order to arrive at the weight of slag it is necessary to know not only the measurements of the heap, but also the specific gravity of the material, and this does not seem to have been determined, but only guessed. In the absence of specimens of the Wâdî Nasb slag the writer determined the specific gravity of five specimens of similar copper slag from Sêh Baba, which was found to vary from 3.1 to 3.5 with a mean of 3.36 and this will be assumed to be approximately correct also for the Wâdî Nasb slag. On this basis the calculated weight of the slag is as follows:

(a) From Petrie's dimensions, 98,000 tons, which is very close to Petrie's own estimate of 100,000 tons.

(b) From Bauerman's dimensions, not less than 100,000 tons.

Rickard states that the slag contains the equivalent of 2.75 per cent. of copper¹, which on 50,000 tons of slag represents 1375 tons of copper; he assumes this to be one-third of the amount of copper the ore was capable of yielding, which is thus estimated at 8.25 per cent. and therefore that two-thirds of the possible copper in the ore or 2750 tons was recovered. As already stated, 50,000 tons for the slag is too small an amount and probably the estimate of 8.25 per cent. for the copper content is also too small, since malachite when separated from extraneous rock yields 57 per cent. of copper. In order to be on the safe side, however, let 8.25 per cent. be accepted as the yield of copper and that only two-thirds of this was recovered, then the slag heap represents about 5400 tons of copper.

Slag heap at Sêh Baba. The dimensions of one heap as given by Petrie are 80 ft. by 60 ft. (4), but another estimate is 50 ft. by 50 ft. by one foot (18). The specific gravity of the slag, as already stated, is 3.36. The weight of the slag therefore is as follows:

(a) According to Petrie's dimensions, 450 tons.

(b) From the alternate dimensions, 235 tons.

The amount of copper represented by this slag would be either 25 tons or 13 tons, according to which dimensions are accepted.

Slag heap at Kubbân. This heap is 105 ft. long by 13 ft. broad (25), but the height cannot easily be measured on account of the accumulated sand. Let it be assumed to be 2 ft. The specific gravity of two specimens of the material determined by the writer was 2.9. The total amount of slag therefore is 220 tons. If the amount of copper in the original ore and the proportion recovered be assumed to have been the same as for Sinai this heap will represent 12 tons of copper.

On the evidence of the slag heap at Wâdî Nasb the amount of metallic copper from the Sinai mines amounted to a minimum of 5400 tons, but probably more, excluding that from the smeltings at Maghârah, Sêh Baba, Gebel Safariat, the plain of Senned and the hill region of the extreme south-east, which together may have been considerable, but for which, except for a portion of that at Sêh Baba, no estimate can be made. As a working hypothesis, let it be assumed that the total amount of copper obtained anciently from Sinai was 8000 tons. To this must be added that from the eastern desert, for which the only basis for an estimate is the slag heap at Kubbân, which almost certainly represents only a very small fraction of the ore smelted. Let the amount be assumed to be 2000 tons, which makes a total of 10,000 tons for all Egypt.

Judged by present day requirements, 10,000 tons seems very little, but it should not

¹ A specimen, probably from the Wâdî Nasb, analysed by Sebelien (*Ancient Egypt*, 1924) contained 21.65 per cent. of copper. This slag, however, is not uniform in composition and contains metallic copper, both in large pieces and as coarse grains, and unless properly sampled by a competent person an analysis of an isolated specimen is likely to be misleading.

be forgotten that Egypt was, as it still is, a comparatively small agricultural country, and that at the beginning of the period under discussion copper had only recently been discovered and was just coming into use and must have been both scarce and expensive, and that throughout the whole period by far the greater proportion of the population did not use copper. But, allowing all this, is it possible that some such comparatively small amount as 10,000 tons was the total quantity employed from predynastic times until about the Twelfth Dynasty, a period of approximately 1400 years? In the Eighteenth Dynasty, when mining was resumed after an interval of about 200 years, increased demands were admittedly met by importation from abroad, and even about the Twelfth Dynasty, bronze, an alloy of copper and tin, which replaced copper for many purposes, was beginning to be imported.

In the writer's opinion 10,000 tons were quite sufficient for all the needs of the country and had there been any very urgent demand for more, the mining expeditions would have been much more frequent. Thus during the period in question only 169 inscriptions are recorded, which is at the rate of one about every 8 years and many of these are connected with turquoise-mining and not with copper-mining. Even some 5200 years after the beginning of the period mentioned and some 3800 years after it had terminated, namely in the year 1800 A.D., or only 127 years ago, when copper was employed for many more purposes and very much more extensively than in ancient Egypt, the entire world's production of the metal was only 10,000 tons (26). It may be mentioned, too, that the weight of copper objects from ancient Egypt for the whole period of 1400 years that have been found, the greater proportion of which are now in various museums, does not amount to more than a few tons.

Date of first mining.

Sinai. It has already been mentioned that the earliest mining expedition that left any record in Sinai was of the First Dynasty. At this date metallic copper had been in use in Egypt on a small scale for a considerable time, since it has been found in graves of the Middle Predynastic Period, and malachite, the ore from which copper was principally obtained, had been employed still longer, having been found in the earliest predynastic graves. It is reasonable to suppose therefore that before the first mining expedition, that of Semerkhet, went to Sinai it was known that malachite existed there, otherwise the fitting out and sending of an expedition to Sinai would not have been undertaken. It should not be forgotten, too, that, as shown by the inscription, it was not a small private venture, but one sent by or in the name of the pharaoh and consisted of a party numerous enough to fight and overcome local opposition.

How the knowledge of malachite and the first specimens of it reached the Nile valley there is nothing to show, but a few facts that may throw some light on the question may be mentioned. First, the Sinai malachite deposits are not on or near the routes to either Syria or Arabia, and therefore trading caravans would not be brought into contact with the ore; second, the ancient inhabitants of the Nile valley were probably as much afraid of venturing far from the river as their modern descendants, who even today do not go into the desert except for short distances in certain districts to obtain stone, gypsum, nitrous earth and sometimes to search for and rob ancient tombs; and third, the desert has its own inhabitants, the nomad tribes. It is suggested therefore that malachite from surface deposits was first observed and collected by nomads, possibly on account of its green colour, and traded by them to the Nile valley (where it was used as an eye paint) exactly in the same manner as the Maghârah

turquoise mines are worked at the present day by the local bedouin who sell the product to merchants at Suez. Thus a small irregular trade in malachite would spring up which would be stimulated and increased when this material began to be in demand for making copper. The place of origin of the malachite could hardly have been kept secret for long and eventually the urgency for a larger and more regular supply would lead to the dispatch of mining expeditions, the earliest of which appears to have been in the First Dynasty.

Eastern Desert. So far as is known there are not any inscriptions in the eastern desert in connection with copper-mining such as those occurring in Sinai, the expeditions to this region that left records on the rocks being for the purpose of obtaining stone, and the inscriptions being at or near stone quarries. Too much stress, however, should not be laid on the absence of inscriptions, since neither are there any inscriptions at the gold mines, though there are inscriptions referring to gold and gold-mining in other places, for example in the Wâdî Hammâmât and in the temples of Bîr Fowakhir and Wâdî Abâd respectively (27).

It may be mentioned, too, that in the enumeration of the tribute taken by the Egyptians at various times from the peoples who dwelt to the south, as in Genebteyew, Kush, Negro Lands, South Countries and Wawat, there is no mention whatever of copper (8).

Strabo possibly refers to the eastern desert of Egypt when in describing Ethiopia he states that "There are also mines of copper, iron and gold" (28), but the geography of Strabo's time was very vague, and Southern Ethiopia, which is in the Sudan, or even the Sudan generally, where such mines exist, may have been meant rather than the northern part of Ethiopia, which is in Egypt.

The sole indication at present known of any date in connection with copper-mining in the eastern desert is that furnished by the slag heap at Kubbân, the fort there having certainly been occupied during the Empire, but not earlier than the Twelfth Dynasty (29, 30).

The only attempt to fix a date for copper-mining in the eastern desert is one made by Professor Elliot Smith, who refers the discovery of copper to Upper Egypt, thus claiming for the eastern desert mines priority in date over those of Sinai (31). The evidence adduced, however, is not sufficient to support the contention and consists of the statements, first, that a copper ore (malachite) has been found in predynastic graves in Nubia, and second, that in the Wâdî 'Alâkî in Nubia there is an ancient copper mine, from which presumably the malachite was obtained.

Malachite, however, is very common in all Egyptian predynastic graves that have yet been discovered, not only in Nubia, but also in other parts of the country, for example at Naḳâdah (32) (near Kûs), at Ballâṣ (32) (near Kufṭ), at Abydos (33), at Nag'ed-Dêr (34) (near Girgah) and near Mêdûm (35) respectively, the latter of which is only about 50 miles from Cairo.

The Nubian copper mine referred to is presumably the Abu Seyâl mine that has already been described; it is not however in the Wâdî 'Alâkî, but some distance to the north, and so far as can be ascertained there are no copper mines in the wâdî itself and the ore is not malachite but chrysocolla. It is possible, too, that the exploitation of the Abu Seyâl mine may not have been earlier than the Nineteenth Dynasty, when Seti I (1313 B.C. to 1292 B.C.) and his successor Ramesses II (1292 B.C. to 1225 B.C.) both sent expeditions to this region for gold (8), and it does not seem unlikely that copper-mining may have been undertaken at the same time.

Although not tenable so far as the Wâdî 'Alâkî is concerned, Professor Elliot Smith's

argument might, however, be held to apply to the eastern desert generally and therefore this point needs to be considered. There is no doubt that malachite does exist in the eastern desert and it may have been mined at an early date, but on the other hand it may well be that the malachite found in the Nubian predynastic graves, if indeed it was obtained from the eastern desert, may have consisted of isolated specimens that had been picked up without mining in the neighbourhood of the deposits.

Copper-mining in the eastern desert never appears to have been on nearly so extensive a scale as in Sinai and apparently there were no government mining expeditions and no records are known, either in the vicinity of the mines or elsewhere, that would indicate that any great amount of importance was attached to the Upper Egyptian copper ore. It should not be forgotten, too, that when the pharaoh Semerkhet of the First Dynasty (who probably resided at Thinis near Abydos in Upper Egypt) required copper ore it was to Sinai he sent and not to the eastern desert.

As already mentioned, if copper-mining was being conducted in a systematic manner and on a large scale by the government in Sinai in the First Dynasty, as apparently was the case, this means that it was not merely for the sake of malachite to be used as an eye paint, but for the far more important copper, and it also means that there must have been mining of some sort in the same place at an earlier period, though possibly on a much smaller scale and by the local tribes, thus throwing the date of the mining of copper ore in Sinai back to predynastic times. If predynastic copper-mining and the predynastic production of copper be referred to Nubia, this means two separate discoveries of copper, one in the north and another in the south, much about the same period in two different and widely-separated parts of the country, a conclusion that seems improbable and one that would tell strongly against Professor Elliot Smith's main argument for a single centre for the knowledge of copper.

Discovery of Copper.

The evidence for copper-mining in ancient Egypt and the probable amount of copper produced having been discussed, the question of the discovery of copper may now briefly be considered. An ore of copper, malachite, was employed in Egypt as an eye paint in the earliest Predynastic Period of which graves have been found (at least about 4000 B.C.) and no such early use of malachite, or other ore of copper, is known outside Egypt. Malachite, as has been shown, occurs both in Sinai and in the eastern desert, and since an expedition was sent from the Nile valley to obtain it from Sinai during the First Dynasty, this material must have been known from that locality at an earlier date. Since from malachite copper may be produced by the very simple process of heating it in a wood or charcoal fire, it is highly probable that the first production of metallic copper was by accident from this ore.

The use of malachite as an eye paint would present innumerable opportunities for its accidental heating in a manner that would produce a small quantity of copper, whereas no such opportunities would occur in countries where malachite, or other copper ore, was not employed. Metallic copper was known in Egypt in the Middle Predynastic Period. In the earliest graves in which it has been found it was in the form of small articles, such as rings and needles, and only in graves of a later period were there weapons and tools, that is to say, copper did not appear suddenly in a comparatively highly-developed form, as would have been the case had it been imported, but all the stages of evolution from the simplest objects to the more complex have been found

in proper sequence, and unless it can be clearly proved that copper was known outside Egypt at a period anterior to its use in Egypt, which has not yet been done, it is only reasonable to credit the Egyptians with the discovery.

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ALEXANDRIA¹

By H. I. BELL

In the autumn of the year 332 B.C. Alexander of Macedon with his victorious army, fresh from the defeat of the Great King at Issus and the capture of Tyre, entered Egypt from the East and marched on Memphis. Only a few years had elapsed since the country, after a century of independence, had been reconquered by Persia; and Alexander, greeted as a deliverer by the Egyptians, had no difficulty in securing its submission. He was crowned king of Egypt at Memphis, and already, by sacrifices to the local gods and by gymnastic and musical contests in the Greek manner, he showed himself in the rôle of reconciler between Orient and Occident. He spent the winter in Egypt, during which time he visited the oracle of Ammon and was hailed as son of the god. On his way thither he passed down the western or Canopic branch of the Nile to the little fishing village of Rhakotis. Some archaeologists have traced on the site the remains of early harbour constructions, but others dispute their inferences; and in any case there can have been little to attract the attention of the traveller in the village of the fourth century B.C. A low, sandy coast with a small island lying off it, an unimportant village of poor fisher-folk—there was in this nothing to suggest the future glories of Alexandria. Yet this was the site which Alexander, already conscious of his mission as the disseminator of Hellenic culture in the lands of the East, chose as the site of the city which he had resolved to found on Egyptian soil. It is of course easy to infer that because Alexander was one of the supreme geniuses of history and Alexandria one of the greatest cities of the ancient world the success of the city was due entirely to the genius of the man; and equally easy for those who are never happy except when reversing some received opinion to argue that the importance of Alexander's foundation was the result of causes quite beyond Alexander's ken. No doubt the truth lies between these extremes. For all his impetuosity and daemonic force Alexander possessed a cool judgement and a clearness of vision which few statesmen have equalled, and we may be quite certain that he chose the site of his new city for sufficient reasons. He may have been influenced, as has recently been suggested², by a certain resemblance which the position bore to that of Tyre, the city whose rôle of mercantile and naval centre he designed his new foundation to assume; but it had more solid advantages.

¹ This paper is a lecture given for the Society on Feb. 23, 1927, as one of a series under the general title "Cities of Egypt." It is published here in response to requests from several of those who heard it, with a minimum of references, chiefly to recent publications or to Greek texts. Among books which may profitably be used for the history and topography of Alexandria in general are: E. BRECCIA, *Alexandrea ad Aegyptum* (Engl. ed., 1922); J. P. MAHAFFY, *A History of Egypt under the Ptolemaic Dynasty* (2nd ed., 1914); J. G. MILNE, *A History of Egypt under Roman Rule* (3rd ed., 1924); V. EHRENBURG, *Alexander und Ägypten* (*Beihefte zum "Alten Orient,"* 7); W. SCHUBART, *Ägypten von Alexander dem Grossen bis auf Mohammed* (1922); P. JOUGUET, *L'impérialisme macédonien et l'hellénisation de l'Orient* (1926, see index). For the constitution and classes of population, see P. JOUGUET, *La vie municipale dans l'Égypte romaine* (1911) and W. SCHUBART, *Alexandrinische Urkunden aus der Zeit des Augustus*, in *Arch. f. Pap.*, v, 35-131.

² See the article by B. A. VAN GRONINGEN, *À propos de la fondation d'Alexandrie*, in *Raccolta di scritti in onore di Giacomo Lombroso*, 200-211.

The splendid harbours so familiar in Hellenistic and Roman times were rendered possible only by extensive works, but the configuration of the coast and the island off the shore suggested and facilitated these undertakings. The Mareotic Lake behind the site, communicating with the Nile, offered the chance of a fresh-water harbour accessible from both sea and river. The set of the current in the Mediterranean eastwards involves for the other coastal harbours a constant tendency to silt up from which Alexandria is free, a fact probably made known to Alexander by the Greeks of Naucratis. Lastly, there may also have been a reason of a political kind. Rhakotis had no special associations or prestige, and a Hellenistic foundation there could develop its Hellenic culture unthreatened by the weight of native tradition.

There can be no doubt that, as I have said, Alexander intended his new foundation to take the place of Tyre; but it has been suggested¹ that his ideas in this matter changed, and that had he lived he would probably have restored Tyre to its old position—that in fact it was only the death of its founder which secured to Alexandria its pre-eminence. This is quite possible; in 331 Alexander, however much he may have realized the need of union between East and West, was still first and foremost King of Macedon and Captain-General of Hellas, the champion of Europe against Asia; but as his conquests spread further eastwards he came to feel himself the successor of the Great King, and Greece and Macedon were now but a small part of his dominions, so that a port communicating directly with his Asiatic possessions might seem more useful than one so far away as Alexandria. However, the Mesopotamian fever removed the decision from his hands; and when he died in 323 the new city still held the field as the destined successor of Tyre in the mercantile supremacy of the eastern Mediterranean.

Alexandria did not fall behind her destiny. Settled by a people then full of energy and the spirit of enterprise and always distinguished by special commercial capacity, commanding a country proverbial for its fertility and inhabited by an industrious population, connected with the routes that led to the Red Sea and the spice-producing countries, with a harbour which, after the completion of the necessary works, could rank with the best in the world, the city was obviously fore-ordained to be the mercantile capital of the East. Of its earliest history we know very little. Alexander had apparently no idea of making his foundation the capital of the country, and it was probably from Memphis that his representative governed; nor did his death at once produce any change in this respect. The prudent Ptolemy son of Lagus, esteeming a bird in the hand worth two in the bush, instead of wrangling with the other marshals for the position of regent of the whole empire, contented himself with the fat province of Egypt; and he further secured the body of the great conqueror. Armed with this precious mascot, he set off for his province, leaving his colleagues to fight out their differences in Asia, and took up his residence at Memphis, where Alexander's body was at first buried. It was not till several years later (the date is uncertain) that Ptolemy transferred the capital to Alexandria. This step was probably due to a change of policy². At first he seems to have followed Alexander's lead in favouring the amalgamation of Greek and Egyptian, but if so he abandoned this policy later and adopted towards the natives the attitude of conqueror to conquered which was to be maintained by his successors until the growing weakness of the dynasty compelled them to make concessions to their Egyptian subjects. The removal of the seat of government to Alexandria was the outward sign of this new course, and the more discerning natives can hardly have failed to draw the

¹ By GRONINGEN, *op. cit.*, 210 f.

² See KORNEMANN, *Die Satrapenpolitik des ersten Lagiden*, in *Raccolta Lumbroso*, 235-245.

right conclusion. Other measures in the same sense followed. Alexander, to mark his desire for friendly relations with the Egyptians, had founded a temple of Isis at Alexandria. Ptolemy, who had made the new god Sarapis, evolved at Memphis, the meeting-point of Greek and Egyptian and in some sort the national god of his dominions, presently established the centre of the cult at Alexandria, where it seems to have taken on more definitely Hellenic forms. Further, his son removed to Alexandria the body of Alexander, which, laid in a splendid tomb, became the object of an elaborate cult, with its eponymous priest, and a relic to be visited for centuries by votaries and tourists.

When Ptolemy transferred his capital to Alexandria the city must already have emerged from the chaos and confusion of a new foundation, but much labour was certainly required to transform the desolate sand-hills and the village of Rhakotis into the Hellenistic city. Designed by Dinocrates on the regular plan, with straight streets intersecting at right angles, so popular in Hellenistic town-planning, it was built on the comparatively narrow neck of land between the Mareotic Lake and the marine harbour. The lake, connected with the Nile, which was itself linked by a canal (completed by Ptolemy Philadelphus) with the Red Sea, had a connection also with the harbour, so that it served as a fresh-water haven. A mole was built to join the island of Pharos with the land, and the construction of further works on the east side produced a safe and ample marine harbour. On the west was a second harbour, the so-called Eunostus Haven, the only one now used. From east to west of the city, which was more long than wide, ran a great street over a hundred feet broad, intersected about the middle of the city by another street running from north to south: and the other streets, which were regularly named, were parallel to these. At either end of the main street were the two principal gates, of which the eastern was called in later times the Gate of the Sun and the western the Gate of the Moon. Colonnades, giving protection from the sun, ran the whole length of the street.

From the first Alexandria seemed destined for its rôle of a melting-pot in which East and West, Greece and Egypt and Asia and countries as yet hardly known, could meet and contribute their several quotas to a hybrid culture. There were of course Macedonians, who at a later time certainly and possibly from the first were not a part of the regular citizen body but formed a special class of the population with their own privileges. Their recognition of a new king was at least formally necessary, and they seem to have corresponded in some measure to the Janissaries of a later day. The mass of the ordinary citizens were doubtless Greeks, though they may have included Hellenized representatives of non-Greek races: but they were certainly drawn from many parts of the Greek world, and many different dialects must have been heard in the streets, until the single dialects gave place to the so-called *koinê* or lingua franca of the Hellenistic age. Attic at bottom but with elements derived from other dialects. Besides the full citizens there were, not perhaps at first but certainly later, other Greeks not enjoying the Alexandrian citizenship. Then there were, from the very foundation of the city, Jews, whose numbers in later times grew very greatly¹. They were not citizens in the technical sense but formed a community within the community, a *politeuma* as it was called, with its own organization, its council of elders, its officials, and its archive and notarial office, enjoying moreover to some extent its own laws. The Phrygians formed yet another *politeuma*; and there were also the Persians of the Epigone, though

¹ For the Jews of Alexandria, see my *Juden und Griechen im römischen Alexandria* (Beihefte zum "Alten Orient," 9, 1926) and the literature there referred to.

they can hardly have been an original element in the city. Finally, there were the native Egyptians, not only those of the old village but also the inhabitants of Canopus, whom Alexander ordered to be removed to his new foundation. They were entirely excluded from the citizenship, though individuals from time to time acquired it. Marriage was not of course recognized between Greeks and Egyptians, but irregular unions must have been common enough, and cultural intermixture, the borrowing of native usages and beliefs, was inevitable. Already at the end of the third century B.C. the Alexandrines were a mixed race, and it cannot have been a very long time before the population ceased to be predominantly Greek or Macedonian and was reduced to that unprepossessing amalgam we can only call Levantine. Ancient authors do not speak with enthusiasm of the later Alexandrines. Fickle, excitable, unruly, at once industrious and pleasure-loving, flippant and sharp of tongue, irreverent yet subject to fierce bursts of religious fanaticism, and always liable to accesses of rage and cruelty, they were for centuries a thorn in the side of whatever power had the responsibility of keeping order.

The city was divided into five quarters called after the letters of the Greek alphabet. The Delta quarter was assigned to the Jews: the native quarter was in the west.

About the constitution of Alexandria we are not well informed. We do not even know whether it possessed a senate, that hall-mark of self-government. It is certain that it had none under the Romans until the time of Septimius Severus, but it is matter of controversy whether Augustus found there a senate, which he abolished. On the whole, the most probable hypothesis is that Alexander gave the city a senate, which some Ptolemaic king took away, perhaps after one of the civil wars in which Alexandria espoused the losing side. There was no doubt an ecclesia or popular assembly, of course with little real power, and there were the usual magistrates, among whom I may mention the gymnasiarch or head of the gymnasium, the exegetes, a high official with various functions, including that of keeping the register of citizens, the eutheniarch, in charge of the food supply, and the cosmetes, the leader of the ephebi or young citizens. It was through enrolment among the ephebi that citizenship was secured, and an attested record of such enrolment was as useful a document as our birth-certificate. Several documents of this kind have been found: it may be worth while to quote one, of the Imperial period¹:

"Date of entry among the ephebi 13th year of Emperor Caesar Titus Aelius Hadrianus Antoninus Augustus Pius, 12th Sebastos [Thoth]. Theon son of Theon of the Propapposebastian tribe and Althaeon deme, thirty years old, and his wife Sarapias daughter of Dion, citizeness, thirty years old, with her legal guardian assigned her by minute of the prytaneis dated in the prytaneum the current year and month, namely Theon son of Tryphon of the Musopaterian tribe and Althaeon deme, fifty-eight years old, of Arsinoe Nike Street, stating that they are united in a marriage without contract, [enter] their son Theon, one year old, in the 29th year of Emperor Caesar Trajanus Hadrianus Augustus, Pharmouthi 22...² of the detachment of Ptolemy son of Antipater."

Naturally citizenship, which carried with it substantial advantages, both material and social, was much coveted, and fraudulent enrolment of youths not entitled by birth to the honour was not uncommon. The regulations of the department of the *Idios Logos* under the Romans provide for the confiscation of a sixth of the income as a penalty for this offence³.

¹ WILCKEN, *Chrestomathie*, 146. It should be added that in all the extant examples there are features which suggest that this form was used only in certain special cases.

² The meaning here is uncertain.

³ SCHUBART, *Der Gnomon des Idios Logos*, 22 ll. 121 f.).

As will have appeared from the document just quoted, the citizen body was divided into tribes each subdivided into demes. A favourite way of doing honour to a ruler and his family, at least in the Roman period, was to rename a tribe after him. Thus, on the accession of Claudius one tribe received the name Claudian¹.

Alexandria had its own law-courts and its own code of laws. These laws, known in their totality as *ὁ πολιτικός νόμος* or "the civic law," were recognized even in the royal courts. They were founded to a large extent on the Attic law but with modifications partly derived from other systems and partly due to the special circumstances of Alexandria. They were supplemented from time to time by decrees of the citizens, and the inhabitants were of course subject in addition to the royal decrees. Besides the strictly civic officials there were also royal officials, so that the city, as a royal residence and the capital of the empire, was in a somewhat hybrid position compared with the self-governing cities of Asia Minor.

Once made the capital of Egypt and under the active and enterprising rule of the first two Ptolemies, Alexandria rapidly grew in beauty and splendour. On the island of Pharos rose the famous lighthouse, the prototype of all such buildings, and reckoned one of the wonders of the world. Designed by Sostratus of Cnidus, it was inaugurated early in the reign of Ptolemy II Philadelphus and dedicated to Ptolemy I and his wife under the title "the Saviour Gods." It rose in three storeys to a height of some 120 metres, was provided with lifts in addition to the staircase, and had a powerful light visible thirty miles out at sea. It seems moreover to have had something in the nature of a telescope, perhaps worked by refracting mirrors. The royal palace stood on the east side of the eastern harbour and, as king after king added new buildings, came to form almost a separate quarter. In the same quarter were the Museum and the Library, of which I will speak presently; and a little to the west was later built the Caesareum. This building, begun by the famous Cleopatra as a temple to Antony, was completed after the Roman conquest as one in honour of Augustus. The Jew Philo, in the middle of the first century, gives a well-known description of it²: "There is not in the world such a precinct as the so-called Sebasteum, the temple of Caesar patron of mariners, which rises conspicuous opposite the excellent harbours, very large and noticeable and unmatched for the wealth of its votive offerings, being surrounded with pictures, statues, silver and gold. In the extensive precinct are porticoes, libraries, men's apartments, sacred groves, propylaea, open spaces, halls open to the sky: in fact it is embellished in the most sumptuous way and gives hope of safety alike to those who set out and to those who disembark." Other famous buildings were the tomb of Alexander, the precinct or mausoleum of the Saviour Gods, the Brother Gods and the other deified Ptolemies, the huge gymnasium, and the temple of Sarapis, which, as befitted the shrine of a god intended to provide a meeting place for Greeks and Egyptians, stood in the west of the city, near the native quarter. There were many parks and gardens: for the Alexandrines shared the Egyptian love of flowers, and the flower-sellers and sellers of garlands were a familiar sight in the streets. Ptolemy II Philadelphus seems to have carried out a systematic renaming of the streets in honour of his dead sister-wife Arsinoe, equating her in each case by means of a cult title with some goddess. Thus we hear of a street of Arsinoe the Queen, that is, Arsinoe in the rôle of Hera Basileia or Hera, Queen of Heaven, Arsinoe the Compassionate, a title borrowed from the cult of Aphrodite, Arsinoe the Eleusinian identified with Demeter Eleusinia, and Arsinoe of the Brazen House identified with Athene Chalkioikos, the patroness of Sparta³.

¹ P. Lond. 1912, 41.

² *Leg. ad Gaium*, 22, 151.

³ *Journal*, xii (1926), 247.

The Ptolemies did not neglect for material splendour the aesthetic and intellectual life of their capital. It was famous above all for the Museum and the Library. The former, ostensibly a temple of the Muses with a priest of the Muses as president, was in fact a great university or college very similar in constitution to an Oxford or Cambridge college to-day. In it were gathered scholars of various kinds receiving a salary from the royal treasury which, with the common revenue of the Museum, enabled them, as teaching was not obligatory, to devote themselves to research. In the Library they had close at hand an ample literature. The Library was the greatest in the ancient world, and by the Roman period its contents were counted by hundreds of thousands of rolls. Ptolemy II made the most strenuous efforts to collect books from all over the Greek world: his son Euergetes is said to have issued an order that all travellers disembarking at Alexandria should deposit any books they had with them, which were then taken for the Library, the owners receiving in exchange an official copy¹. Nor was the collection confined to Greek literature: translations of works in other languages were also acquired. But it is a myth that the Septuagint version of the Bible was made by command of Ptolemy II. It was produced gradually, for the use of the Hellenized Jews of Alexandria, more familiar with Greek than with their mother tongue.

By the middle of the third century B.C. Alexandria was already the greatest city and commercial centre in the Greek world. Scholars, poets, scientists, merchants, mariners, soldiers, agriculturists, and mere sightseers flocked to it from all parts, whether to settle there or to go on to Middle or Upper Egypt, where Greek enterprise and the enlightened policy of the king were bringing much derelict land under cultivation and increasing everywhere the productivity of the soil. Products from many parts of the world were to be seen on the quays. Ivory, ebony, gold and spices came from Africa, even the products of India were not wanting, in later times at least silk from China was on sale there, while from the Greek lands came oil and wine, honey, figs, pickled fish and meat, sponges, etc. The corn of Egypt was carried down the Nile on boats to the great corn-market of Alexandria: and in the city itself many articles were produced, in particular glass, linen, and papyrus. The population must have shown as many racial types as modern Cairo. In a papyrus which contains a contract for a commercial expedition to the land of Punt to buy spices² we find among the parties and their sureties men from Sparta, Elea in Italy, Carthage, and Marseilles, and one who from his name may be a Roman; and in a contract of loan dated in B.C. 252³ occur a Persian of the royal guard, a Roman, and three men of Barca. One is reminded of the altercation in the 15th idyll of Theocritus, where the stranger, exasperated by the chattering of Praxinoa and her friend, exclaims: "My good women, do stop that everlasting prattling, like a couple of doves! They wear me out with their broad Doric," and Praxinoa replies: "Good gracious, where *does* the fellow come from? What is it to you if we do prattle? You buy your slaves before you order them about. It's Syracusans you're giving orders to. I'd have you know we're Corinthians by extraction—like Bellerophon you know; we talk Peloponnesian. I suppose Dorians are allowed to talk Doric?"

Of course this meeting of races and peoples meant a great mingling of cultures and religious ideas. From Alexandria the cult of Isis and Sarapis spread through the whole Graeco-Roman world. In Alexandria was made the Septuagint version of the Bible, in which for centuries the Greek Church has read the Scriptures and from which they were translated into Coptic, Syriac, Armenian, and other languages, not to mention the Old

¹ Galen (ed. KÜHN), XVII, i, 606.

² Published by WILCKEN in *Zeitschr. f. äg. Spr.*, LX, 86-102.

³ *Archic*, VII, 19 f.

Latin version. In Alexandria Philo worked out his doctrine of the Logos, so important for Christian theology. And Alexandria was one of the chief centres of the syncretism, the combination of various cults into a body of Pagan theology, which supplied the sinews of war for the last struggle between Paganism and Christianity. No wonder: for in the streets of Alexandria votaries of Sarapis, of Astarte, of the Great Mother, of the rider god of Thrace, of Olympian Zeus and Jupiter Capitolinus and Carthaginian Tanit, yes, and of deities stranger and more mysterious, Celtic and African and Asiatic, jostled one another continually.

Her commercial and industrial importance, and her rôle as a centre of religious and cultural syncretism, did not exhaust the importance of Alexandria. Alexandrian literature will not bear comparison with that of the classical period, but it has a real importance. It is true that the word Alexandrian has come to suggest pedantry and artificiality, and certainly the writers of the school had too much learning for the comfort of their readers. A fragment of the *Aitia* of Callimachus¹ gives us an interesting glimpse into his workshop and shows him at a banquet eagerly collecting from a chance acquaintance out-of-the-way lore for use in his poem, and the incident is characteristic. The Alexandrines were too much dominated by the classics of the great age as regards the forms of their poetry, while to balance this they aimed at novelty in the matter of theme and treatment: they were continually pouring new wine into old bottles, sometimes with distressing results. The well-known epigram of Callimachus contains the very essence of Alexandrinism: "I detest the cyclic epic and love not a road that bears many hither and thither. I hate a common love and drink not from a fountain: I loathe all that belongs to the generality." The penalty for such an attitude is preciosity and affectation, and the Alexandrines did not escape it. Yet the hymns of Callimachus and the epic of Apollonius Rhodius have very real merits if we will accept what they give and do not look for qualities they never aimed at: and the experiments of the Alexandrines were of permanent value. They gave us in the idylls of Theocritus a new genre and a handling of it which has never been equalled since: and the theme of romantic love, discovered but not adequately exploited at this period, was to affect the whole course of European literature.

But the services of the Alexandrines to literature were not confined to their own productions. The scholars of the Museum invented the science of textual criticism. Their practice of it was not impeccable, but we owe them an immense debt. It was always held, and the evidence of papyri confirms it, that the texts of several of the classical authors had grown very corrupt by the third century B.C., and it is to the editorial work of the Alexandrian scholars that we owe, in substance, the texts we read today. And who knows how much even of the Greek literature we possess might have perished but for the zeal with which they searched for MSS.?

Perhaps, however, it was in science and mathematics that Alexandria stood highest. Its medical school was famous, particularly in anatomy and surgery, in which it advanced far beyond the Hippocratean school. In biology it was less illustrious, though biology was studied there, helped no doubt by the Zoological Garden established by the Ptolemies. Its greatest triumphs were in the realm of mathematics and mechanics. At Alexandria Aristarchus anticipated Copernicus by the discovery that the earth moves round the sun, Eratosthenes measured the earth's diameter, arriving within 50 miles of the true length, and Euclid wrote his *Elements*; and among others who worked or studied there were Archimedes, Apollonius of Perga, Ptolemy, and Heron, who invented (or at least

¹ P. Oxy. xi, 1362.

described) the steam engine and the penny-in-the-slot machine. Only the curious deadness and desiccation which fell upon the Greek genius a little before the beginning of the Christian era prevented the Greeks from anticipating many of the marvels of modern science and led to the neglect of those already discovered.

It is obvious that in a single lecture it is impossible to deal adequately with the history of a city which was the scene of so many important occurrences, and in any case I have left myself little time for this. I must content myself with a very summary sketch of the main course of events, dwelling only on a few incidents in passing.

During the third century B.C., while the power of the dynasty was at its height, Alexandria experienced few vicissitudes. Pageants, festivals, visits of foreign ambassadors were the outstanding events. A recently discovered papyrus contains a letter from the Finance Minister of Ptolemy II¹ to his agent in the Fayyûm informing him of the coming of the envoys from Argos and the ambassadors from Paerisades, apparently a king of Bosphorus, to see the sights. An embassy came, we know, from Rome, and even one from India; for the Buddhist Emperor Asoka sent his missionaries also to Ptolemy II to preach the good news of deliverance from the wheel of things. Did they, one wonders, find any response in the heart of the voluptuous king, sated with pleasures and glory?

With the accession of the debauchee Ptolemy IV Philopator a change began. There was first the scene so dramatically presented by Plutarch, when the noble exile Cleomenes, King of Sparta, weary of his captivity, broke from his gilded prison with a handful of followers and called upon the citizens to win liberty, only to find that the word left them unmoved and to die on his own sword. Then, after the death of Philopator, occurred the great riot, when the king's vile mistress and her brother, after murdering the much-loved queen, appeared before the populace with the ashes of the royal couple and a flood of mock tears, and the mob rose against them. The rising was abortive until the Macedonians revolted, when the two criminals were torn to pieces. The history of the second century B.C. was largely a chronicle of domestic feuds among the members of the royal family and of civil war, with occasional interventions, as time went on, by Rome, and the Alexandrines must have seen their fill of fighting. During the reign of Ptolemy VIII officially known as Euergetes, "the Benefactor," though his loving subjects called him Physkon, "Fatty," the king massacred so many of the citizens in the constant disturbances that the character of the population seems to have changed considerably. Polybius, who visited Egypt at this period, gives the following account of Alexandria: "The city has three racial elements: the Egyptian and native race, smart and civilized, the mercenary troops, overbearing, numerous and licentious (for they have long been accustomed to maintain armed mercenaries, who have been taught by the worthlessness of the kings rather to rule than to obey), and third the Alexandrian element, even that not really civilized for the same reasons, though better than the others; for although of mixed race, they were of Greek origin, and had not forgotten the common characteristics of the Greeks²." But this part of the population, he goes on to say, had been wiped out—doubtless an exaggeration.

By the first century B.C. Egypt had become little better than a protectorate of Rome, and when the worthless spendthrift Ptolemy XIII, nicknamed "the Fluteplayer"

¹ The letter is to be published in the forthcoming number of *Symbolae Osloenses*. It is hoped to include a facsimile of it in the next part of the New Palaeographical Society's series.

² Polybius, xxxiv, 14, 2-3.

from his favourite occupation, was driven into exile by his subjects. Gabinius, the Roman governor of Syria, restored him and occupied Alexandria. Later came Julius Caesar in pursuit of Pompey and, falling a victim to the fascinations of Cleopatra, was besieged in the royal palace by the adherents of her brother. For a time he was in the gravest danger, and in the desperate fighting that ensued parts of the city, particularly near the palace, suffered severely. But it is not true, as often stated, that the Library was destroyed.

The independent history of Egypt ended with the joint reign of Antony and Cleopatra, and when that passionate episode was concluded by the death of the two lovers, Octavian annexed the country to the Roman empire. While at Alexandria he settled the affairs of the city, granting an amnesty and confirming its privileges; and according to Dion Cassius "he bade the Alexandrines conduct their affairs without a senate owing to his suspicions of their volatile character." This has been interpreted to mean that he abolished an existing senate, but does not necessarily imply this, and some recently discovered evidence seems to me to make against the supposition¹. However this may be, there can be no doubt that Roman rule was by no means popular with the Alexandrines, who could never reconcile themselves to the loss of the city's position as the capital of an independent country, and always looked upon Rome as an upstart. They were from henceforth in a position of permanent hostility to the government, and even the presence of the strong Roman garrison, which occupied a large camp to the east of the city, could not prevent constant disturbances. A whole class of literature grew up expressive of this nationalist feeling. It consists of reports, modelled upon and perhaps in part derived from the official *Acta*, but worked up in a strongly propagandist sense, of legal cases tried at Rome in which Alexandrian magistrates were concerned, and from its resemblance to the Christian martyrologies has received the name "*Pagan Acts of the Martyrs*." As these disputes frequently concerned the Jews this literature is strongly anti-Jewish, but the primary enemy was Rome.

The Jews, with their religious ideas which precluded them from taking any part in the ordinary life of the city, had never been popular, and their unpopularity was increased by the fact that they had abandoned the Ptolemaic dynasty and made their peace with Rome. They were moreover agitating for yet greater privileges than they possessed. In particular they desired the full Alexandrian citizenship and even to be admitted to the public games, though orthodox Jews regarded the athletic exercises of the Greeks, in which the competitors appeared naked, with abhorrence. The mutual hostility grew during the early part of the first century, and in the reign of Gaius, better known by his childish nickname of Caligula, the storm burst. Agrippa, the grandson of Herod the Great, a well-known spendthrift and the boon companion of Caligula, was made by him king of a portion of the ancestral dominions, to which he came, following the example of the Assyrian of old, with his cohorts "gleaming in purple and gold," with a body-guard of splendidly apparelled soldiers; and on his way he called at Alexandria. His previous visit to the city had been in the rôle of a bankrupt fleeing from his creditors: and the sight of the ex-bankrupt with his comic-opera guard escorted through the streets by the cheering Jews proved too much for the excitable Alexandrian mob. Laying hold of a well-known idiot, they dressed him in mock-royal robes, surrounded him with a burlesque body-guard, and escorted him to the

¹ See my *Jews and Christians in Egypt*, 8-10. On the other side, J. G. MILNE, *Hist. of Egypt under Roman Rule*, 3rd ed., 282-286.

gymnasium, where they greeted him with cries of "*Marin*," "*Marin*," a Syrian word for king. Was there anyone present, one wonders, who had witnessed a similar scene a few years earlier at Jerusalem, when Roman soldiers and the Jewish rabble bowed the knee in mockery to One whom they hailed as "King of the Jews"?

It was a glorious rag; but when it was over the jesters remembered that Agrippa was the intimate friend of the Emperor and that it was ill jesting with the master of the world. A brilliant way of escape from the danger that threatened them offered itself. Caligula had proclaimed himself a god and ordered his subjects to worship him: the mob, to put itself right with him, called upon the Jews to obey his commands, and when they refused and the prefect, already under the Emperor's displeasure and afraid to interfere, remained inactive, the cry was raised to place the Imperial effigy in the synagogues and to drive the Jews, who had greatly increased in numbers and spread through the city, back to the Delta quarter. The Jews resisted desperately and a terrible struggle followed, in which several of the synagogues were destroyed and the others desecrated and pillaged. The mob, having tasted blood, was now quite out of hand, and all the horrors familiar in later pogroms were witnessed, the Jews, even women and young girls, beaten to death, roasted over slow fires, and robbed of all they possessed. These atrocities lasted several days and led eventually to the famous Jewish embassy to the Emperor so graphically described by Philo, himself one of the envoys. But they got no satisfaction, and their synagogues remained closed till the accession of Claudius. He also was a friend of Agrippa and lost no time in issuing an edict confirming all the privileges of the Jews. The latter meanwhile had risen against their oppressors and a second desperate struggle had taken place which required all the energies of the Roman authorities to suppress. A recently discovered letter of Claudius to the Alexandrines¹, in reply to a complimentary embassy of theirs, alludes to this affair, exhorting both sides to keep the peace in future and threatening the aggressor in any new outbreak with the severest penalties. The Jews he warns against agitating for any further privileges, adding "otherwise I will by all means take vengeance on them as fomenting a general plague for the whole world." The Alexandrines had, it appears, asked the Emperor for a senate, and in this letter he shelves the matter by referring it to what we may call a royal commission.

The loyalty of the Alexandrines was not increased by these events, and their hostility to the Jews was greater than ever. There were constant collisions between the two races in succeeding years, and under Nero, shortly after the revolt of Judaea, occurred a battle so desperate, the Jews being this time the aggressors, that 50,000 of them are said to have been killed before the prefect could suppress them. It will perhaps be of interest to quote a characteristic passage from the nationalist literature to which I have referred, relating a trial at Rome before Claudius, as it well shows the factious and insolent spirit of the Alexandrines. Isidorus the gymnasiarch had brought an action against Agrippa II:

"Claudius Caesar: You have killed many friends of mine, Isidorus. Isidorus: I listened to the commands of the late Emperor. And you, tell me whom you wish and I will accuse him. Claudius Caesar: Truly you are the son of a chorus girl, Isidorus. (Isidorus:) I am not a slave nor yet the son of a chorus girl but gymnasiarch of the famous city of Alexandria. As for you, you are the cast-off bastard of the Jewess Salome.... So Lampon said to Isidorus: Well, what can we do but give way to an insane monarch?"²

¹ P. Lond. 1912 (*Jews and Christians in Egypt*, 23 ff.).

² WILCKEN, *Chrestomathie*, 14.

It is not surprising to learn from another fragment of the same literature that Lampon and Isidorus were put to death.

We hear of a further conflict in the reign of Trajan, and later in the same reign Alexandria passed through a still more terrible experience during the great Jewish revolt, which, beginning in Cyrene, spread at once to Egypt and later to Cyprus. Alexandria with its garrison (much weakened indeed by the withdrawal of troops for the Parthian war) was at first exempt: but when the local forces, heavily defeated by the invading Jews of Cyrene, had fled to Alexandria, they wreaked their fury on the Jewish population of that city. In the struggle that followed the accumulated resentment of a whole century was given free play. Much of the city was laid waste, the Jewish quarter and the principal synagogue were destroyed, while the Jews on their side burned the temple of Nemesis and did much other damage. Even when the revolt was over, so far at least as Alexandria was concerned, further disturbances occurred between the two parties, and the Alexandrines, discontented at some Imperial order, expressed their dissatisfaction in lampoons on the new Emperor Hadrian which, sung about the streets, led to wholesale arrests. Those hard-headed Romans were so insensible to Alexandrian humour! The city had to be in large part rebuilt, and, much to the disgust of the Greeks, the Jews were allowed to return to their old quarters. A few years later Alexandria was once more in an uproar over a religious dispute among the Egyptians: but Hadrian's visit in 130 had an excellent effect, and for a good many years afterwards the excitable populace seems to have kept the peace.

We have several descriptions of the Alexandrian people at this period. One is contained in the lay sermon preached to them by the pagan sophist Dion Chrysostom in Trajan's reign, in which he deals with them very faithfully. He lays great stress on their passion for music, to which other writers also allude, and on their frivolity. "It is not easy," he declares, "for a stranger to endure the clamour of so great a multitude or to face these tens of thousands unless he comes provided with a lute and a song. For this is the antidote against your populace...and I myself, if I were a musical man, should never have come hither without some song or air¹." And again he says: "You spend all your time in heedless mirth, and are never at a loss for sport and pleasure and laughter: for you are given to jesting yourselves and you have many who can provide you with jests, but I see in you an utter want of seriousness²." Another picture is to be found in the letter of Hadrian quoted by Vopiscus. It is probably spurious or at least interpolated, but the writer clearly knew the city well, though his ideas about Christianity are strange: "The worshippers of Serapis are Christians and those who style themselves bishops of Christ are devoted to Serapis. There is there no head of a Jewish synagogue, no Samaritan, no Christian presbyter, who is not an astrologer, a soothsayer, a ring-master....It is a most seditious, frivolous and criminal populace, living in a city rich, opulent, productive, in which none lives idle. Some are glass-blowers, some makers of papyrus, some linen-weavers, all have some art or other. The gouty have something they can do, the blind likewise, not even those with gout in the hand are idle. Their one god is money: this the Christians, this the Jews, this all alike venerate³." Towards the end of the century, St. Clement gives many vivid pictures of Alexandrian society, coloured no doubt by his hortatory purpose. Apart from graver faults and vices, which apparently even the Christians shared, he inveighs against the extravagance and frivolity of the women, against (I quote him verbatim) "their adorn-

¹ Dion Chrys., *Oratio* xxxii, 20 21.

² *Ibid* 1.

³ Vopiscus, *Saturn. Vita*, S. 2 7 (*Script. Hist. Aug.* xxix).

ments and dyed wools and variegated colours and wrought stones and gold jewellery, their artificial hair and wreathed tresses, their paintings under the eyes, their pluckings out of hair and rougings and cosmetics and dyeing of hair and all such evil arts of deceit...their gold-wrought fabrics, their Indian silks and overwrought silken stuffs." "Why, their bodies," exclaims the exasperated father, "if they were on sale, would not fetch a thousand Attic drachmas, but they will spend a thousand talents on a single dress. So do they confess themselves of less worth and less utility than their own clothing!¹"

It must not be thought indeed that Alexandria was entirely given up to frivolity and amusement. At this very time St. Clement was founding the great school of Christian theology among whose great names is Origen, the profoundest of early Christian thinkers, and which was to have so immense an influence on the thought of the Church: and pagan philosophy still flourished in the city.

I have little time for the later history of Alexandria, and it will be best to select one or two incidents only. Let us come down to the fourth century, when Christian theology begins to take the place of older causes of controversy. We are in the midst of the great persecution, probably in the year 305. Many Christians, bishops, priests and laity, are in prison at Alexandria. Others however have proved of less constancy and have sacrificed to idols. Among the prisoners has arisen a dispute as to the attitude to be taken towards these weaker brethren. Peter, Bishop of Alexandria, would treat them leniently: Meletius, Bishop of Lycopolis, is for sterner treatment. The dispute grows furious: neither party will give way. "When," says Epiphanius, "the Archbishop Peter saw that the party of Meletius, carried away by godly zeal, resisted his humane opinion, he made a curtain in the midst of the prison by spreading out his garment, that is to say his coverlet or his cloak, and proclaimed by the voice of a deacon: 'Let those who are of my opinion come over to me and those who agree with Meletius to him.'" The majority, in no mood apparently for compromise, went over to Meletius, but a small party adhered to Peter². So began the Meletian schism, which was to last in Egypt for four centuries and in its earlier days was to play a very important part owing to the alliance of the Meletians with the Arian party.

A recently published papyrus shows us some of the consequences of this dispute. It is a letter written in May 335 by a Meletian in Alexandria to the heads of a Meletian community in Middle Egypt describing the sufferings of the sectaries at the hands of St. Athanasius, who was at this time under summons to attend the Synod of Tyre, called to try the charges brought against him by the Meletians. The letter is too long to quote at length, but parts of it will be of interest: "On the 24th of Pachon Isaac the Bishop of Letopolis came to Heraiscus at Alexandria, and he desired to dine with the Bishop in the Camp. So the adherents of Athanasius, hearing of it, came bringing with them soldiers of the Duke and of the Camp: they came in a drunken state at the ninth hour, having shut the Camp, wishing to seize both him and the brethren. So certain soldiers who were in the Camp and had the fear of God in their hearts, hearing of it, took them and hid them in the store-chambers in the Camp: and when they could not be found they went out and found four brethren coming into the Camp: and they beat them and made them all bloody, so that they were in danger of death, and cast them forth outside Nicopolis. Then they departed again to the Gate of the Sun, to the hostel in which the brethren are entertained, and they seized five others there and

¹ Clem. Alex., *Pæd.* ii, 10 (MIGNE, *Patr. Gr.*, VIII, 521, 525, 536).

² Epiphanius, *Adv. Hæc.* LXVIII, 3 (MIGNE, *Patr. Gr.*, XLII, 188).

confined them in the Camp in the evening, and they shut them up till the commandant came out to the guard-room towards morning: and the commandant and the scribe took them and he ordered them to be cast forth out of Nicopolis: and Heraclides the keeper of the hostel they bound and maltreated, threatening and enjoining him: 'For what reason did you admit the monks of the Meletian party into the hostel?'... Athanasius is very despondent. Often did they come for him, and till now he has not left the country: but he had his baggage embarked at sea as though he would go, but till now he has not gone....He carried off a bishop of the Lower Country and shut him in the Meat Market, and a priest of the same region he shut in the lock-up, and a deacon in the principal prison...and on the 27th he caused seven bishops to leave the country¹. It is a vivid picture of the great Athanasius, anxious and irresolute whether to obey the Imperial summons, which as he knew was inspired by his bitter enemies, yet resolved while still in Egypt to strike quickly and hard at the local opposition.

Now let us come down some twenty years later, when the position was reversed. Athanasius is indeed still in possession of the see of Alexandria, but his deposition has been decreed by the Arian Emperor Constantius and his successor George is appointed. A large congregation—for Athanasius was popular in the city—is keeping vigil in the great church of Theonas in preparation for a service on the morrow. Suddenly Syrianus the Duke of Egypt surrounds the church with a large body of soldiers. Athanasius has left us a vivid picture of the scene that followed: "He encircled the church, posting his soldiers near, so that none could escape past them. I, thinking it unreasonable at such a crisis to leave my flock and not rather to face the danger on their behalf, sat down on my throne and bade the deacon read and the people hear the Psalm 'For His mercy endureth for ever' and then all of them depart home²." But "as the lection was proceeding,"—I quote now from the letter of complaint written by the Alexandrian laity—"they broke down the doors: and when by force of numbers the doors were opened [the Duke] gave the order and some began to shoot and others to raise the war cry, and the clash of arms resounded, while the swords flashed in the light of the lamps. The inevitable horrors followed: virgins ravished, many people trampled under foot, falling one upon another under the charge of the soldiers, and men dying from the arrows³." Not until the soldiers were already round the sanctuary was Athanasius hurried away by the clergy. In such forcible ways did men debate in ancient Alexandria the nice philosophical question whether the Son is or is not of one substance with the Father.

Early in the fifth century occurred two events of which one was of immediate importance while the other had at least a symbolic significance. The first was the violent expulsion of the Jews, with seizure of their synagogues and confiscation of their property, by a Christian mob led by the able but turbulent and unscrupulous Patriarch Cyril; the other, shortly afterwards, the brutal murder of the woman philosopher Hypatia by another Christian mob led by a lector and at least not reprimanded by the Patriarch. The philosophic school of Alexandria was not of much importance now, but the event was, as I have said, symbolic. What place was there for "divine philosophy" in a city dominated by ignorant monks and terrorized into a narrow orthodoxy? The orthodoxy indeed did not long endure: for Cyril's successor Dioscorus, as overbearing as he but less subtle, was condemned as a heretic, and the great mass of the Egyptian

¹ P. Lond. 1914 *Jews and Christians in Egypt*, 58 ff.

² Athanasius, *Apol. de Egypt*, 24 (Migne, *Patr. Gr.*, xxv, 676).

³ Athanasius, *Hist. Arian*, 81 (Migne, *Patr. Gr.*, xxv, 793).

people followed him into the Monophysite heresy. From this time the glory of Alexandria as a centre of thought and learning was over. The Egyptians themselves had no capacity for abstract thought; the solid phalanxes of fanatical monks were content to follow their leaders in what to them was primarily a struggle against the alien power of Byzantium, and the leaders occupied themselves in endless splitting of trivial theological hairs.

Alexandria was still an important commercial and administrative centre, but its days even as such were numbered. Occupied by the Persians when they conquered Egypt and recovered by the Imperial forces, it received as its Patriarch, intended to win back Egypt to orthodoxy, a certain Cyrus, who was at the same time given the position of Augustal prefect. The choice was disastrous: Cyrus's fierce persecution of the Monophysites made the name of Byzantium more hated than ever, and when the Arabs, flushed with victory, invaded Egypt under 'Amr, the Patriarch showed himself quite unfit for his position. The conclusion of the Treaty of Babylon, which surrendered that fortress and indeed the greater part of Egypt to the Arabs, was perhaps explicable, though the Emperor banished him for it: but when, restored to his post by Heraclius's successor, and finding Alexandria invested by the army of 'Amr, he concluded a further treaty by which the Roman army was to evacuate the city after 11 months' armistice, it is difficult to understand such poltroonery except on the supposition of actual treason. The Arabs held most of Egypt, but, as they had not yet developed a naval power, Byzantium commanded the sea, and Alexandria could have held out indefinitely. When the citizens learned, by the arrival of an Arab force to collect the promised tribute, what had happened, the Patriarch's life was in considerable danger, but it was too late to undo what was done: and on Sept. 17, 642, the Roman army sailed out of the harbour. Meanwhile an Arab messenger, despatched to the Khalif, had reached Medina. Arriving at the hour of the midday siesta, he made his camel lie down at the door of the mosque, which he entered. A maid-servant, coming out of the Khalif's house, asked him his name. He told her, adding that he brought news from 'Amr. He was quickly summoned to Omar's presence. "What news?" said Omar. "Good news, O Commander of the Faithful," was the answer: "God has opened Alexandria to us." On Sept. 29 the Arab army marched into Alexandria, wondering at the magnificence of the palaces and the marble colonnades: and though the city was recovered a few years later by the Romans, the Arabs soon retook it. They had transferred their capital to the new town of Fustât, and though Alexandria continued for a time to have some importance as a naval centre, it gradually sank into decay. Used as a quarry for stone, its great buildings one by one disappeared: earthquakes shook the soil and lowered the level until much of the old city was under the sea: and it was not till the nineteenth century that it rose again to importance. At Athens the temple of the virgin goddess, shattered indeed but even today a thing of beauty, still dominates the city; at Rome one cannot move far without seeing some relic of ancient days: at Luxor are to be found everywhere reminders of the glory of "hundred-gated Thebes": but of ancient Alexandria, except for fragments of sculpture and inscriptions in Museums, of Alexandria, the metropolis of the universe as her citizens delighted to call her, hardly a vestige remains.

ΜΗΝ ΔΡΟΥΣΙΑΛΛΗΣ

BY A. E. R. BOAK

The Michigan papyrus roll, Inventory No. 622, described in the *Journal*, ix, 164-67, contains in the abstracts of contracts on the recto two references to a month called Δρουσιλλῆος.

The first reference occurs in Col. II. ix. an abstract of an ὁμολογία ἀρραβῶνος. In l. 2 we read: ἐφ' ᾧ προσκομιζόμενος ὁ Χαρ(ωνίων) παρὰ τοῦ Πατρῶνο(ς) τὰς λ(οιπὰς) ὑπὲρ τῆς τιμῆ(ς) ἀργ(υρίου) (δραχμὰς) χφμ ἕως τῆς ιῆ τοῦ Δρουσιλλήου μηνὸς τοῦ ἐνεστῶτος ἔτους, κτλ.

The second comes in Col. IV. ii. an abstract of a lease of land, where in l. 3 it is stated: πάντων ἐν τῶνδε ἐκφόριον ἀποδό(τω) ἐν μηνὶ Δρουσιλλή(ῳ), κτλ.

The name Δρουσιλλῆος at once suggests Julia Drusilla, sister of Gaius Caligula, and leads us to place it among the honorary names of the months of the Egyptian year introduced by that emperor. This is in harmony with the date of the roll, which is the second year of Claudius. 41/42 A.D., sufficiently close to the principate of Caligula to account for the use of a month-name introduced by him but apparently not retained by his successors. It is only to be expected that Caligula would in this way do honour to his favourite sister, who was deified at her death, whose cult was joined to that of Venus, and for whom divine honours were required in all the cities of the empire: cf. the article "Julia Drusilla" in *R.E.* iv, 935-37.

Grenfell and Hunt, in their commentary on P. Ryl. 159. 10, give a list of eight month-names introduced by Caligula, and suggest the following equivalents among the Egyptian months: Σωτήρ = Phaophi, Ἰουλιεύς = Choiak or Tubi, Γερμανικεῖος = Pachon, Δρυσιεὺς = Pauni, and Καισαρεῖος = Mesore. They find the evidence insufficient for assigning Egyptian equivalents to the names Νερωνεῖος, Γαιῆος, and Θεογεναῖος.

J. VOGT, *Die alexandrinischen Münzen*, 28, n. 71, ventures upon a more complete list of equivalents, but without referring to any fresh evidence. His list, arranged in the order of the months of the Egyptian year, runs thus:

- (1) Θεογεναῖος = Thoth.
- (2) Σωτήρ = Phaophi.
- (3) Γαιῆος = Hathur.
- (4) Ἰουλιεύς = Choiak (confirmed by P. Mich. Inv. no. 1285, unpublished).
- (5) to (8) Caligula's names unknown.
- (9) Γερμανικεῖος = Pachon.
- (10) Δρυσιεὺς = Pauni.
- (11) Νερωνεῖος = Epiph.
- (12) Καισαρεῖος = Mesore.

If Vogt's identifications be accepted, then we must place the month Δρουσιλλῆος as one of the months falling between Choiak, the fourth, and Pachon, the ninth Egyptian month. However, such an identification does not agree with the evidence from the references cited above.

It is true that no inference regarding the position of the month in question can be drawn from the second reference (Col. IV, ii, 3), for the payment of the rental referred to here is to take place in the month $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ in the coming four years, and so we can say nothing about the relative order of $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ and $\Gamma\epsilon\rho\mu\alpha\nu\iota\kappa\epsilon\acute{\iota}\omicron\varsigma$ (Pachon), on the 26th of which this lease was concluded. But the case is different with the reference in Col. II, ix, 3. The agreement summarized here was drawn up on $\Gamma\epsilon\rho\mu\alpha\nu\iota\kappa\epsilon\acute{\iota}\omicron\varsigma$ 18 = May 12, A.D. 42, and the residue of the money owed is to be paid by the 18th of the month $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ of the same year. This can only mean that $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ fell after $\Gamma\epsilon\rho\mu\alpha\nu\iota\kappa\epsilon\acute{\iota}\omicron\varsigma$.

Now the three remaining months of the year are Pauni, Epiph. and Mesore. But it seems certain that $\Delta\rho\upsilon\sigma\iota\epsilon\acute{\upsilon}\varsigma$ corresponds to Pauni, and Καίσαρεῖος is the equivalent of Mesore. This leaves Epiph. as the only possible equivalent for $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$. But Vogt, as we have seen, equates Epiph. with Νερωνεῖος . However, Grenfell and Hunt (*loc. cit.*) have stated that there is no direct evidence as to Νερωνεῖος , and I have been unable to find in the more recent publications anything to support Vogt's suggestion. Consequently, I feel that Νερωνεῖος must be assigned to the interval between Choiak and Pachon, while $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ is to be equated with Epiph.

[In P.S.I. 908, 19 occur the words $\acute{\alpha}\pi\omicron\delta\acute{\omega}\sigma\omega\ \acute{\epsilon}\nu\ \mu\eta\nu\acute{\iota}\ \Delta\rho\upsilon\sigma\iota\ \text{Ἐφείπ}$. $\Delta\rho\upsilon\sigma\iota$ must be meant for $\Delta\rho\upsilon\sigma\iota\epsilon\acute{\iota}$ and thus yields the equation Drusieus = Epeiph. Mr. J. G. Tait had previously suggested to me privately (in an unpublished conjectural list of Gaius's month-names which differs somewhat from Vogt's) that $\Delta\rho\upsilon\sigma\iota\epsilon\acute{\upsilon}\varsigma$ was either Pauni or Epeiph. It appears from P.S.I. 908 that the identification with the former was fallacious. Hence $\Delta\rho\upsilon\sigma\iota\lambda\lambda\eta\varsigma$ must be Pauni. H. I. Bell.]

[In acknowledging Mr. Bell's kindness in supplying the identification of Drusieus = Epiph, I may add that this is confirmed by B. Olsson, *Papyrusbriefe der frühesten Römerzeit*, 28, p. 87, n. 12, a work accessible to me only after the preceding paper had been written. A.E.R.B.]

SOME PHILOLOGICAL AND OTHER NOTES

By AYLWARD M. BLACKMAN

1. A NOTE ON PRINCE HARDEDEF'S SALUTATION TO THE SAGE DEDI,
PAPYRUS WESTCAR, 7. 17 ff.

In footnote 4 on p. 70 of his *Literatur der Aegypter* Professor Erman says: "In diesen Begrüßungen des Prinzen und des Weisen versucht der Erzähler einen höheren Stil und wird uns dabei schwer verständlich." In the course of lecturing on this text to students, and also while preparing the English version of it for my translation of Professor Erman's above-mentioned book, certain ideas occurred to me which, I venture to think, make it possible for me to present readers of this *Journal* with a more intelligible rendering of Hardefef's salutation than has hitherto appeared in any publication.

Three translations are known to me:

(1) That of Erman, which is the latest:—*Dein Ergehen gleicht einem Leben vor dem Altwerden und vor (?) dem Alter, der Stätte des Abscheidens, der Stätte des Einsargens, der Stätte des Beerdigens; (du bist noch) einer, der in den Tag hineinschläft, frei von Krankheit und ohne in Ekel alt zu werden. Sei mir gegrüßt, du Ehrwürdiger!*

(2) That of Sir Gaston Maspero in his *Popular Stories of Ancient Egypt* (translated by Mrs. C. H. W. Johns from the fourth French edition). p. 32:—*Thy condition is that of one who lives sheltered from old age. Old age is usually the arrival in port, it is the putting on of bandages, it is the return to earth; but to remain thus, well advanced in years, without infirmity of body, and without decrepitude of wisdom or of good judgement, is truly to be a fortunate one.*

This may be described as not so much a translation as a very free, and far from accurate, paraphrase.


(3) That of Professor Griffith, appearing in *PETRIE. Egyptian Tales*, I. 26:—*Thy state is that of one who lives to good old age; for old age is the end of our voyage, the time of embalming, the time of burial. Lie, then, in the sun, free of infirmities, without the babble of dotage: this is the salutation to worthy age.*

The main difficulty unquestionably lies in the words $\overline{\text{𓂏}}\text{𓂏} = \overline{\text{𓂏}}\text{𓂏}$, which Erman renders "ohne in Ekel alt zu werden." Maspero "without decrepitude of wisdom¹," and Griffith "without the babble of dotage." Erman and Maspero, despite the determinative $\overline{\text{𓂏}}$, have taken khkht as a derivative of $\text{𓂏} = \text{𓂏}$ "become old," and while the former scholar renders *sryt* by "Ekel," having in mind various occurrences of the word in medical papyri, where it has been rendered "vomiting," "retching," the latter evidently connects it with $\overline{\text{𓂏}} = \overline{\text{𓂏}}$ "foretell," "declare."



In a recent article B. Ebbell² has shown that the word *sryt*, written $\overline{\text{𓂏}}\text{𓂏} = \overline{\text{𓂏}}\text{𓂏}$, $\overline{\text{𓂏}}\text{𓂏} = \overline{\text{𓂏}}\text{𓂏}$, $\overline{\text{𓂏}}\text{𓂏} = \overline{\text{𓂏}}\text{𓂏}$, means "cough." The last of the four writings of *sryt*, except for the substitution of 𓂏 for $\overline{\text{𓂏}}$, is the same as that in the passage in *Pap. Westcar*, where the word must also mean "cough."

¹ Maspero takes *nd-hrt* as also dependent on *khkht*, translating it "good judgement," which is impossible.

² *Zeitschr. f. äg. Spr.*, 59, 144 ff.

In view of the determinative , it is impossible to connect *khkht* with *khkh*, "grow old," as Erman and Maspero do. Moreover, such a meaning does not make sense, if *sryt* means "cough," as it surely must do in the light of Ebbell's article. The determinative clearly points to some meaning connected with action of the mouth or voice, as has been recognized by Griffith in his translation "babble."

Gardiner in his *Egyptian Grammar*, § 274, points out that "verbs signifying continuous or repeated human actions, habitual occupations, sounds, colours, and violent movements, are apt to be created from biliteral or triliteral stems by the repetition of two of the radical consonants." Thus *khkht* must be a derivative from a verb **khkh*¹, meaning to make some sort of noise or perform some action with the mouth or throat repeatedly; in view of the context it must mean to "cough" or "hawk repeatedly."

Apart from the fact that combination of the consonants *kh* suggests the sound of coughing or hawking, it is to be noted that the Arabic verb  *kahh* also means "to cough," and from it is derived the substantive  *kahhah*, "a cough." It is highly probable that the Egyptian and Arabic words are etymologically related.


Nn khkht nt sryt is therefore doubtless to be translated literally "without repeated hawking of the cough," i.e. "without bouts of coughing."



I might add that I have noticed that old men of the peasant class in Egypt are markedly subject to violent and prolonged fits of coughing.

Erman and also Sethe² take *hr* in line 17 to be the preposition, and not as I. following Professor Griffith, always supposed, the particle "and," "further." Erman accordingly renders it "vor," which is not one of the meanings assigned it in the "limited set of uses" enumerated by Gardiner in his *Egyptian Grammar*, § 167.

On the other hand, the sense is greatly improved by taking *hr* not as the preposition but as the particle, here introducing a non-verbal sentence with nominal predicate and nominal subject. The construction is defined by Gardiner, *op. cit.*, § 125, as that of *direct juxtaposition*, the subject introduced by *hr* preceding the predicate. When the subject of a non-verbal sentence with nominal predicate is a noun, direct juxtaposition is, as Gardiner points out, practically obsolete in Middle Kingdom texts, but he notes a few instances and refers to others in note 6. In the passage under discussion occurs apparently the only known instance of this type of sentence being introduced by *hr*³.

Erman renders *st mīny st krs*, etc., "die Stätte des Abscheidens, die Stätte des Einsargens," etc., which gives an unsatisfactory meaning, seeing that "old age" is a state not a locality.

In his admirable review of WEILL, *Décrets royaux*, in *Proc. Soc. Bibl. Archaeology*, xxxiv, 261, note 14, Gardiner points out that when prefixed to words meaning some member of the body  expresses the activity of that member. Thus *st-ib* means "affection," "wish," *st-hr* "supervision," *st-c* "activity." The force of *st* in this *Pap. Westcar* passage, where it is compounded not with a member of the body, but with the infinitives of verbs of action—to die, to encoffin or enwrap, to bury—is to impart to these infinitives a sense of present activity, to assign them a concrete rather than an abstract sense.

¹  , a participial or substantival form of what is probably the otherwise unknown simplex of **khkh*, occurs in a to me unintelligible passage in *Pap. Ebers*, 39, 3.

² See his *Aegyptische Lesestücke*, p. 29.

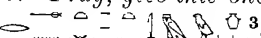
³ See GARDINER, § 133, note 6. For the use of *in* as an introductory particle in such sentences, i.e. *in* + noun + participle, see GARDINER, § 125, obs.


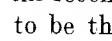
"(Du bist noch) einer, der in den Tag hineinschläft" is an impossible rendering of *sdr r šsp* (lines 18 f.). Surely *sdr* is imperative and the words are to be translated: "Sleep on until daylight (free from malady, etc.)," which affords excellent sense and requires no textual emendation.

Finally, equally impossible is the translation of *nd-ḥrt imšhy pw* by "Sei mir gegrüsst, du Ehrwürdiger." These words form a non-verbal sentence, of which *pw* is the logical subject placed after the logical predicate *nd-ḥrt imšhy*, "the salutation of (or 'enquiry after') one who is venerable¹." The phrase can only mean: "This is the salutation for (or 'proper to') one who is venerable."





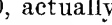
The whole of the passage, therefore, should be translated: *Thy condition is like life before becoming old,—for old age meaneth death, enwrapping, burial* (whereas you, though so old, are still hale and hearty). *Sleep on until daybreak, free from malady², without bouts of coughing! That is the salutation proper to one who is venerable.*


2. A NOTE ON *PAPYRUS WESTCAR*, XI, 6 FF.

In this passage Rezwoser is represented as saying to the goddesses who have delivered Rud-djedet of her three children:—*My ladies, what can I do for you? Pray, give this one measure of barley to your chairman (?)*, that ye may take it to you .

The signs here read *r swnt tmw* have till recently been read *r swnt r nmw*. Bissing⁴ has taken the supposed word  to be the same as , which occurs in the Annals of Tuthmosis III⁵ with the meaning "vats," but has a different determinative.


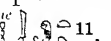
There are three objections to the reading *r swnt r nmw*.

(1) For some time past I have felt very doubtful about the transcription , for the sign above the  looks much more like  than : and I now see that Sethe in his *Aegyptische Lesestücke*, p. 30, actually reads .

(2) If we are to translate as Erman (also Maspero⁶) following Bissing does, *als Lohn in (eure) Behältnisse*, we must supply  after *nmw*, for "as recompense into the receptacles" is hardly sense; "your receptacles" is plainly required. Professor Griffith⁷, however, avoids this difficulty by rendering "that ye may take it as your reward to the brew-house," also evidently having in mind the word *nmw* "vats," and supposing them to be here the great jars in which the newly made beer, or the semi-liquid mash from which it was manufactured, was placed to ferment.


(3) *Swnt* means "purchase-price⁸" rather than "recompense."

If *tmw* be, as I think, the right reading, what is the meaning of the word, which, it must be owned, occurs in none of the dictionaries?

In ch. 169 of the *Book of the Dead*⁹ mention is made of a goddess  along with the *ḥst*-cow, the former being associated with *ḥnkt*, "beer," and the latter with milk. In a text in the temple of Edfu¹⁰, a version of part of the above-mentioned ch. 169, the name is mis-spelled ¹¹. The goddess is mentioned in yet another Edfu text¹².

¹ See GARDINER, *op. cit.*, § 128.

² See *Zeitschr. f. äg. Spr.*, 42, 28; *Proc. Soc. Bibl. Arch.*, xxxv, Pl. 31; but see also GUNN, *Syntax*, p. 113 (24).

³ The determinative and three plural strokes  are quite clear in the photographic plate in Erman's edition of the *Papyrus Westcar* (see MÖLLER, *Paliographie*, I, no. 506).

⁴ *Zeitschr. f. äg. Spr.*, 41, 90.

⁵ *Popular Stories of Ancient Egypt*, p. 39.

⁶ ERMAN-GRAPOW, *Handwörterbuch*, p. 143.

⁷ JUNKER, *Stundenwachen*, p. 82.


⁸ ROCHEMONTEIX, *Edfou*, I, 204.

⁹ *Journ. of Egypt. Arch.* XIII.

¹⁰ SETHE, *Urkunden*, IV, 685, 12.

¹¹ In PETRIE, *Egyptian Tales*, I, 38.

¹² NAVILLE, *Todtenbuch*, I, Pl. exc, line 7.

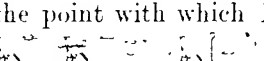
¹³ The woman's head is surmounted by a -shaped object.


The washerman is obviously held up as a type of a mean and mercenary fellow, but neither the words *wn-ib hr hdt hnms* nor *bt(?) mhkf n twzf* need necessarily be taken to refer to him. A perfectly satisfactory meaning is obtained if they are made to refer to *tw*, i.e. Rensi. Then *snf pw ly in nf* must also refer to Rensi, which gives a much better point to the whole sentence. He is so venal that he will throw over his bosom-companion for no matter how humble an individual, provided that person has brought him a gift to bribe him withal!

The passage should therefore be rendered: *Lo, thou art a wretch of a washerman, one rapacious to damage a comrade, one who deserteth(?) his partner(?) for his dependant; he who hath come and brought him (somewhat) is his brother.*

4. P¹CONKHI STELA, LINE 1.

An interesting point in the first line of this famous inscription escaped the notice of Professor Breasted, when he made the translation published in his *Ancient Records*, IV, 418 ff.

The passage containing the point with which I propose to deal is as follows: *Imk nsw tyt ntr šsp-wnh n itm*  *snf nf urw rf*. This is rendered by Breasted: *I am a king, divine emanation, living image of Atum¹, who came forth from the womb adorned as ruler, of whom greater than he were afraid*.

The word *mtu* which Breasted translates "adorned" really means "inscribed²," as indeed the knife-determinative  indicates. Breasted, thinking it impossible for a human being to be born with an inscription on him, has modified the meaning to "adorned," but thereby has destroyed the significance of the passage.

The Pharaoh, it must be remembered, was regarded as a superhuman, or rather supernatural, personage from his very birth. Thus in an inscription of Ramesses II at Abu Simbel³ Ptaḥ is made to say to him: *I have wrought thy body of gold (dcm), thy bones of copper, thy vessels of iron (bz-n-pt)*. Similarly, as pointed out by me in *Journal*, X, 196, the *Pyramid Texts* speak of the bones of the reconstituted body of the dead Pharaoh as being of copper⁴; and in the much damaged description of the fashioning of the dead Pharaoh's new body⁵, copper (*bz*) is distinctly stated to be one of the materials employed, and Sokar is said to smelt for the deceased his bones. Such statements, originally only made in reference to the Pharaoh, alive or dead, became during the First Intermediate Period applicable also to a subject, when he or she was dead⁶.

The passages quoted show that the idea— it might be called a religious fiction— prevailed that the king's body was not of the stuff that ordinary mortal bodies are made of. A remarkable instance of this occurs in the description in *Papyrus Westcar*⁷ of the birth of the divinely begotten children of Rud-djedet: *This child stepped forth on to her hands, a child of one cubit with strong bones: the royal titulary of his limbs was of gold, and his head-dress of true lapis lazuli*.

As ERMAN, *The Literature of the Ancient Egyptians* (English transl.), p. 45, points out, the children are described as coming into the world wearing the blue and yellow striped royal head-cloth, and as having their titles, which every Egyptian Pharaoh assumed on attaining the throne, inlaid in gold on their limbs, i.e. they are conceived of as inlaid bronze or copper figures.

¹ See GARDINER, *Notes on the Story of Sinuhe*, pp. 93 ff.

² ERMAN-GRAPOW, *Wörterbuch*, pp. 170 f.

³ *Pgr.*, §§ 530, 1454, 2051.

⁴ See *Journal*, X, *loc. cit.*

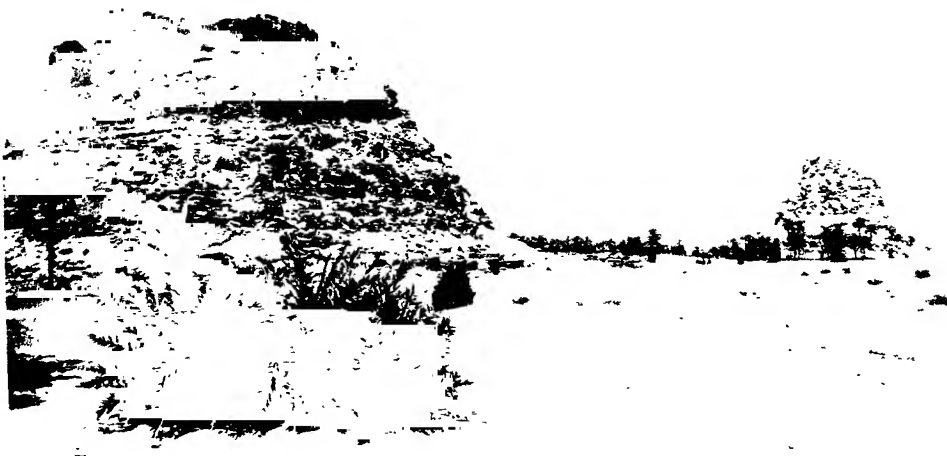
⁵ *L. D.*, III, 193, 9-10.

⁶ *Pgr.*, §§ 1966-1971.

⁷ 10-10 ff.

This of course is what is meant by the word *mtn* in the above-quoted passage in the *Pi'onkhi Stela*. Accordingly *pr m ht mtn m hsk* is to be translated "who came forth from the womb inscribed as ruler," that is to say Pi'onkhy, like the divinely begotten children of the *Papyrus Westcar* story, was supposed to have been born with his royal titles inlaid on his arms.

The occurrence of this or similar ideas in the *Pyramid Texts*, in religious texts of the First Intermediate Period, in a folk-tale of the Middle Kingdom, in a Nineteenth Dynasty royal inscription, and finally in a royal inscription of the Twenty-third Dynasty, shows that the fiction that the king was born with a non-human body was maintained unbrokenly, anyhow in certain circles, for more than 2000 years—a remarkable illustration of the continuity and unchangeableness of Egyptian religious ideas and practices. It is a warning, too, against our supposing that because some religious conception or practice is known to us only from a late text, the conception or practice itself is late. On the contrary it may be as old, or almost as old, as the Egyptian religion itself!



1



2

Stela of Seti I at Nauri.

1. The Nauri rocks from approximately W.S.W
2. The eastern rock. The inscription is on the left above the terrace, marked by a white X.

THE ABYDOS DECREE OF SETI I AT NAURI

By F. LL. GRIFFITH

With Plates xxxvii—xliii

Downstream of the Third Cataract the Nile, after flowing steadily northward, makes a distinct westward bend, turns north again, and then bends almost at right angles to the east on either side of the large island of Arduan; after this the reunited stream flows east to just above the Kagbar Cataract, whence its course is north-eastward past Dalgo. On the south (right) bank of the reunited Nile, just beyond the east end of Arduan Island, lies Nauri¹, at about 35 kilometres north of the Third Cataract as the crow flies and 25 kilometres west of the Kagbar Cataract. Two steep rocky sandstone hills² rise here out of the level plain, about 500 metres apart according to the particulars furnished by Mr. Addison. The western rock is the larger and may be about 400 feet high; on its north side (towards the river) are the remains of a mediaeval fortress. The eastern rock is about 300 feet high; at about one-third of the height and facing north-west (diagonally across the river) is the great stela here published (Pl. xxxvii).

The existence of this stela had been known from native report for some years past to Mr. J. W. Crowfoot as Director of Education in the Sudan, and to Dr. Reisner, whose work in the Nubian part of the Sudan is so famous. In January 1924 Mr. Terence Gray coming from the south arrived at the spot with a moderate supply of squeeze-paper for the express purpose of securing a copy of this unrecorded inscription. For a stela of ordinary size the supply would have been more than ample, but Mr. Gray found himself faced with an inscribed surface of five square metres, much of it very difficult to reach. With the help of scraps of blotting-paper and other substitutes he was able to secure a squeeze of practically all except the scene at the top, the first seven lines of the original stela, and the first eighteen lines of the supplementary inscription. These he copied by hand in positions of great discomfort, drawing what he could reach sign by sign. The result was not elegant, but considering the circumstances the difficult and painful task was accomplished with wonderful success, the squeezes indeed being remarkably good. Mr. Gray proceeding on his journey northward showed the inscription to Dr. Reisner who was then working at Semna, and Dr. Reisner suggested that it might be handed over to me. On his return to England Mr. Gray most generously gave me his hard-won squeezes and copies, with a key-plan to the highly composite material, and from these I was able to recover almost the whole of the surviving text. We discussed the possibility of making a joint expedition in the following winter to obtain a complete squeeze of the stela and follow up certain indications that Gray had observed, but this plan fell through as unfortunately did another for an expedition through the cataract region with Mr. and Mrs. Crowfoot, before Mr. Crowfoot's retirement from the Sudan Service last year. But so far as our stela is concerned, all turned out happily. Mr. Crowfoot having

¹ The name is given on *Map of Africa* in the series of the *Survey of the Egyptian Sudan*, sheet 45 A, scale 1: 250,000, dated 1920, but not on earlier issues.

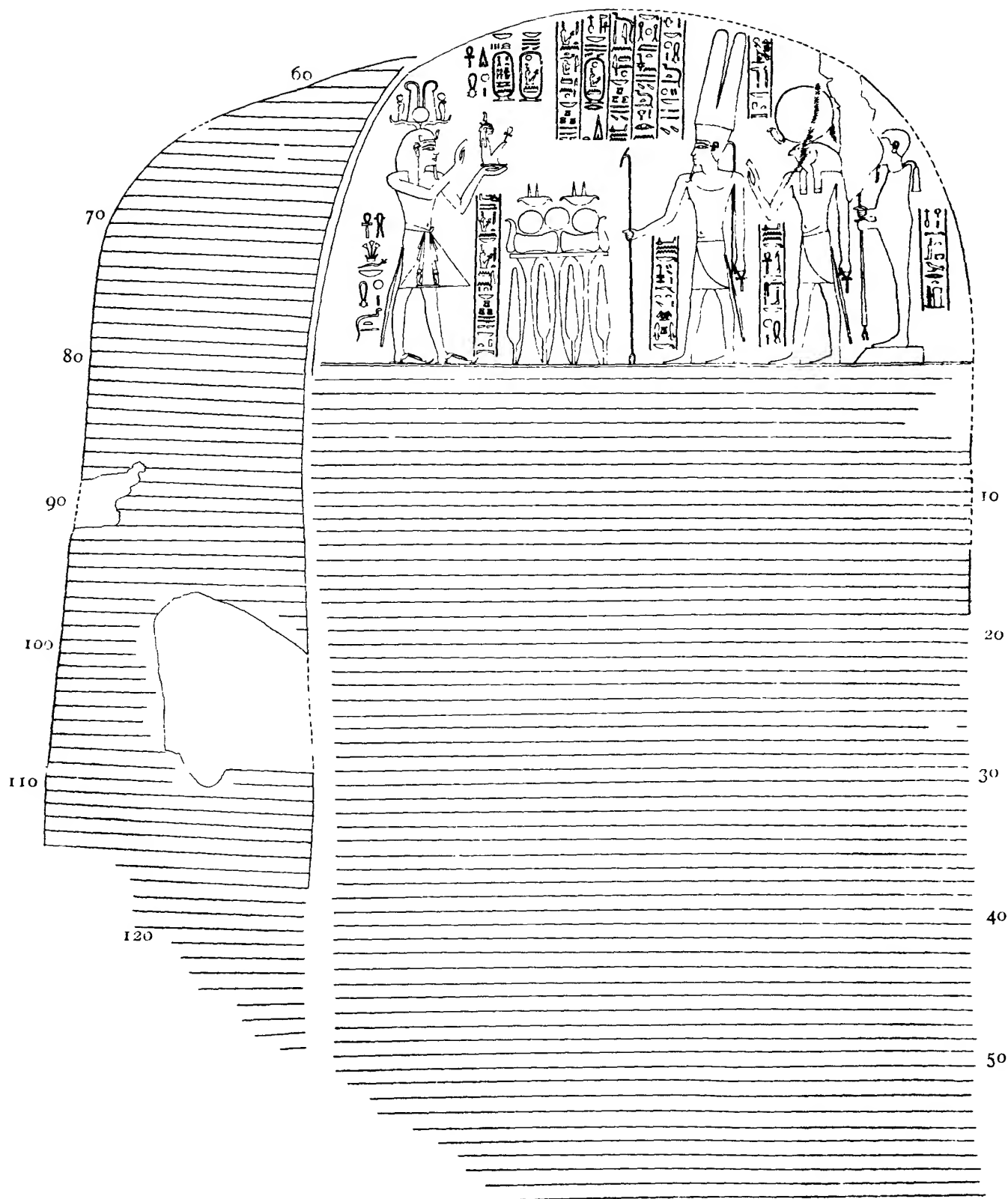
² Marked on the map as "Two Virgins."

requested Mr. Addison, now the Inspector of Antiquities, to procure a squeeze, the latter sent me a complete squeeze together with interesting details of which I have made use above, and the photographs of "The Virgins." Mr. Addison writes: "There is no difficulty in scrambling up to the stela and taking squeezes of the lower portion, but the sill or platform at the bottom is broken away and affords only a precarious foothold. Even from this sill it is impossible to reach the top of the inscription effectively, so I had to get a *dôm*-log and make a sort of stage on which to stand. The squeezes of the offering scene were made by a tall native as I myself could not reach the top¹." To try to photograph the inscription was useless. Apart from the fact that the stela never receives any vertical or side lighting, but only the full sun in the late afternoon, it would be impossible to place a camera for an undistorted photograph. Mr. Addison, however, obtained two foreshortened views from below.

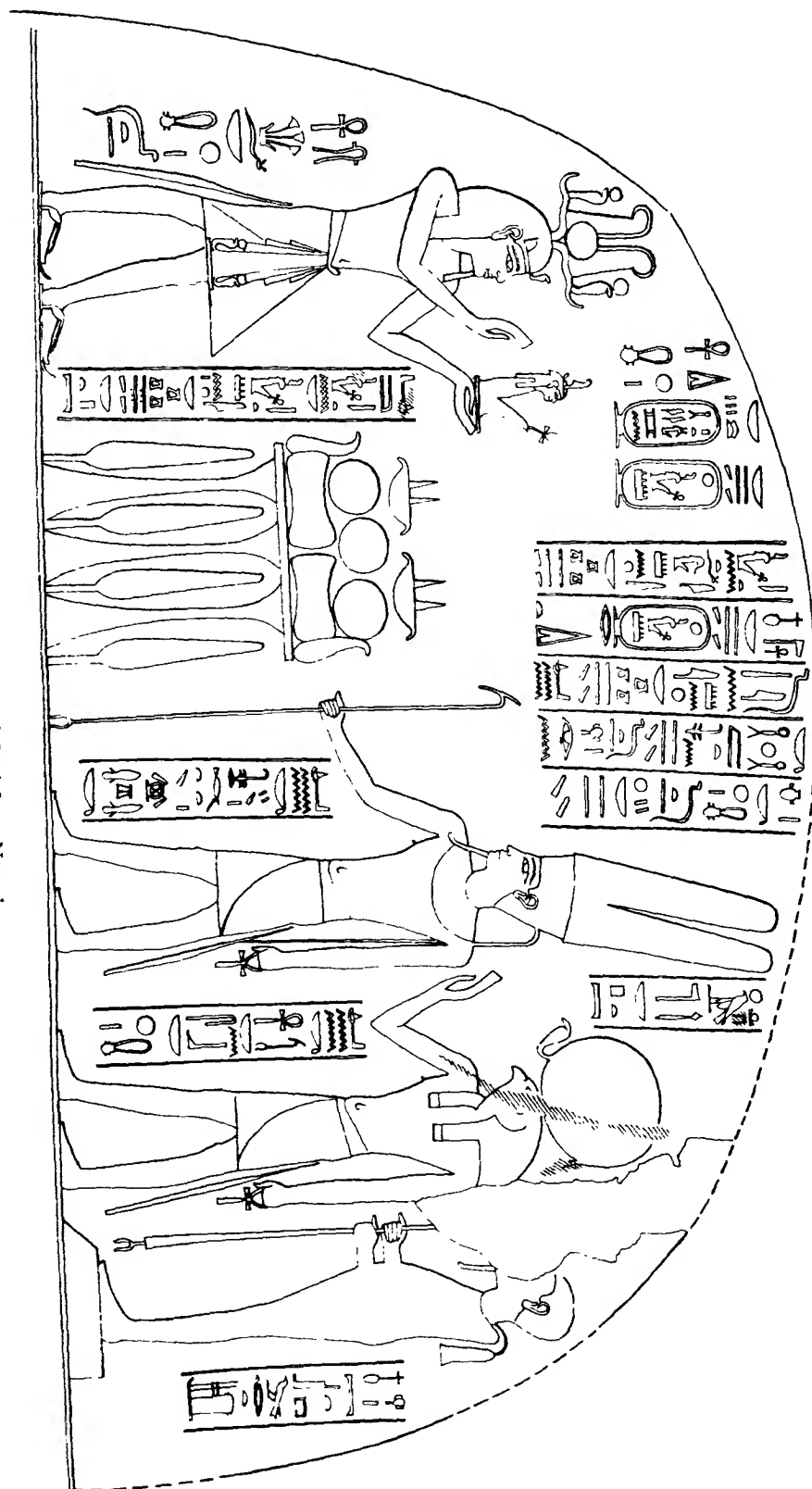
Each of the series of squeezes is far from giving a perfect reproduction of the stela, but with the help of the occasional overlaps they remedy each other's defects to a remarkable degree. The copy in the plates was made as follows: separate photographs on the scale of one-third were taken of each sheet of the Addison squeezes, the back of the squeeze being photographed for clearness and reversed in printing; the prints were drawn upon in Indian ink and faded out, the result in black and white being afterwards corrected, pieced together, and again corrected many times. In correcting it was found that the dark shadows in the print had often misled us as to the amount of ink we had put upon it; but this method assures at least truth of position for each sign in the inscription. The shapes are evidently bad and ill-defined in the original, and are only approximately copied.

As originally designed the stela was of the usual round-topped form with straight sides 2·80 metres (=9 ft. 2 in.) high \times 1·56 metres (=5 ft.) wide, *i.e.*, five and a half cubits by three. The curved top, overhung by the rock above, is occupied by a scene of Seti I offering to the principal deities of the Empire, and the rest by an inscription of fifty-nine lines, the last eight of which are progressively shortened at the end owing to an ancient fissure which forms an oblique boundary to the smoothed surface. The document to be recorded was very lengthy and far exceeded the limits of the original stela, where the inscription ends in the middle of a sentence. A very unusual device was resorted to to obtain the necessary space (Pl. xxxviii). The rock face adjoining on the left of the stela was smoothed on a slightly different plane; the added surface begins not far below the top of the original stela in a wider curve carried on from the old one and reaching down to the same fissure at the bottom. All this space was filled with inscription in sixty-nine lines; at the beginning the lines are very short, but they lengthen out quickly in the new curve and at about the eleventh line (line 70 of the whole) the full normal width of 525 metre = 20½ inches, *i.e.*, one cubit very exactly, is attained. This continues, but with very gradual expansion, to about 615 metre = 25 inches at line 114, after which the lines shorten again at the left-hand end owing to the fissure, until the text triumphantly ends in the last line (line 128), where there was space for no more than five characters. It seems that the scene was designed and engraved before the stela was enlarged, and the curved boundary line for the top was also completed; this line appears to have been continued on the right-hand side as far as line 19 of the inscription, while on the left it stopped at line 2. It is thus probable that little or none of the inscription had been drawn in or engraved before the enlargement was decided on and prepared.

¹ Much detail is invisible in this part of the squeeze and is recoverable only from Gray's sketch confirmed by analogous representations.



Stela of Seti I at Nauri.
Diagram showing irregularities.



Stela of Seti I at Nauri.

Scene : The king offering to the gods of the Empire

The entire stela was sunk below the irregular surface of the rock, which thus forms a protective frame for it. The inscription of the original stela is almost complete, though there are cracks and breaks and pits and worn places here and there; the addition to it is less perfect, particularly for about thirteen lines below the middle where the surface to the right, being particularly prominent on the slight angle between the two faces, must have been exposed to severe sand-wear so that the lines have lost about two-thirds of their length.

The Scene¹, Pl. xxxix.

The king Seti I stands on the left making offerings to Amen-rē, Ra-harakhti and Ptah, the gods respectively of Thebes, Heliopolis and Memphis, revered as the principal deities of the Empire. It is noteworthy that, although the inscription is the record of a decree which appears to be for the benefit of a temple of Osiris, that deity is not figured in the scene.

The king wears a head-dress consisting of a pair of horizontal horns of a ram², supporting a pair of ostrich feathers with disk and two uraei, the *nems* cap with uraeus, loin cloth with tail at the back and elaborate fall³ in front, and on his feet sandals. In his left hand he presents a figure of Mērit⁴, i.e., Right and Justice, perhaps symbolizing a promise of just rule and actions, Mērit being a food on which gods live. Over his head are his two cartouches, *Lord of the Two Lands Men-ma-rē, Lord of Glorious Appearings, Seti Mainepthah*, followed by *Given life like Rē*; in front is written, *Presentation of Mērit to the Lord of Mērit, Amen-rē, Lord of the thrones of the Two Lands, Lord of Heaven*, and behind him *All protection and life about him like Rē for ever*.

Between the king and Amen-rē stand four lettuce plants conventionalized to the shape of trees⁵, and between them the stems of three altars or stands supporting a mat or tray. On this lie two oblong cakes or joints of meat flanked by two cucumbers, three circular loaves, and, resting on the last, two flaming pans, censers, or lamps⁶. Over the altar in two lines to the left is *Live the good god, Lord of the two lands, Men-ma-rē. Giving Mērit to his father, Lord of the thrones of the Two Lands*, and in three lines to the right, *Speech by Amen-rē, Lord of the thrones of the Two Lands: I have given to thee eternity as king of the Two Lands, everlastingness while doing thy heart's desire, like Rē for ever and ever, thou Lord of the Two Lands*. In front of Amen-rē is *I have placed for thee the South and the North together beneath thy sandals*.

The other gods have an inferior rôle. In front of the second deity is his name *Ra-harakhti, Great god, Lord of heaven*, and below this *I have given to thee all life and strength (?)*, *all health, like Rē*. In front of the third, at the level of his head, may have been the name [*Ptah*], the inscription then continuing in a column behind his back, *Beautiful of face, presiding over the Great Place* (i.e., the shrine).

¹ The scene has been beautifully redrawn from our reconstruction by Mr. N. de G. Davies, Pls. xxxviii, xxxix.

² *Ovis longipes*, see Dürst and Gaillard in *Rec. de Trav.*, xxiv, 44.

³ Restored from Gray's sketch by comparison with other examples (L., D., III, 141 b, cf. *ib.* 143 a, c); the squeeze took badly here.

⁴ The flat base is indicated in Gray's sketch and seems to have confirmation in ROSELLINI, *Mon. Stor.*, cxx, 1 = CHAMP., *Mon.*, cxiv (Menephthas); but the figure of Mērit is usually on a basket ∩.

⁵ See KEIMER, *Die Gartenpflanzen im alten Ägypten*, I, 1-6.

⁶ The shape of the pans, indicated in part by the squeeze, is taken from BISSING, *Denkmäler*, II, 78 (Tuthmosis IV offering to Osiris), L., D., III, 141 k (Seti I offering to Khnum).

The Date, Pl. xl.

(1) [Yca]r 4, first month of winter, day 1, beginning of a perpetuity in receiving happiness, hundreds of thousands of years of peace, millions of jubilees upon the throne of the Horizon-god, an eternity of the reign of Atūm.

with the Majesty of Horus, Mighty Bull Shining in Thebes, who makes the two lands to live, Belonging to the Two Goddesses, who repeats births, strong of arm, repressing the Nine Bow-tribes, Hawk of Gold, repeating manifestations, rich in bowmen in all lands, King of Upper and Lower Egypt, Men-mat-r̄c, Son of the Sun, (2) [Seti-Maineptah, living for ever to] eternity, beloved of Amen-r̄c king of the gods, manifested upon Horus' throne of the living, like his father R̄c each day.

The date of year 4, not 14 or otherwise, seems certain, for although the remnant of a sign preceding the units might indicate either 4 or 5, there is not room for 4 or any additional numeral to be read; the fragment of 5 is in the correct position for forming the group $\overline{\text{𓂏}}$ as can be seen from $\overline{\text{𓂏}}$ in line 3.

Between the date and the name and full titles of the king are a number of phrases expressing the idea (or pious wish) that here was the beginning of an eternity of the king's beneficent reign. I do not know of a parallel instance, and it may be attributed to the pleasing exuberance of spirit and language which is observable in this and some other inscriptions of Seti I.

The King and the Gods, Pl. xl.

Behold his Majesty was in the city of Hakeptah¹, doing the good pleasure of his father Amen-r̄c Lord of the thrones of the Two Lands, in Eptesut (Karnak); R̄c-harakhti, Atūm Lord of the Two Lands of On; Ptah the Great, South of his Wall, Lord of the Life of the Two Lands; Sakhmi the Great, Beloved of Ptah; Ptah-Sokar-Usiri in Shetait; Nefertem; Neb-ko; Har-ḥeken; Horus (3).....[Isi]s Mother of a god, Lady of Heaven, The Great Sorceress; Thoth Lord of Words of God; and all the gods and goddesses of To-mur², even as they give to him millions of years, tens of thousands of years of peace, with all lands and all countries and the Nine Bows slain beneath his feet; may he be joyful with his ka like R̄c eternally.

The lacuna at the beginning of line 3 may probably have contained the names and titles of two more divinities. The list begins with the three principal gods of the Empire, Amen-r̄c of Thebes, Atūm of Heliopolis, and Ptah of Memphis, and continues with the local divinities of Memphis and those of other localities associated with them. Like the scene above, it seems to have no connexion with the decree except as a preliminary tribute to orthodoxy and the hierarchic powers before the king indulges his own predilections.

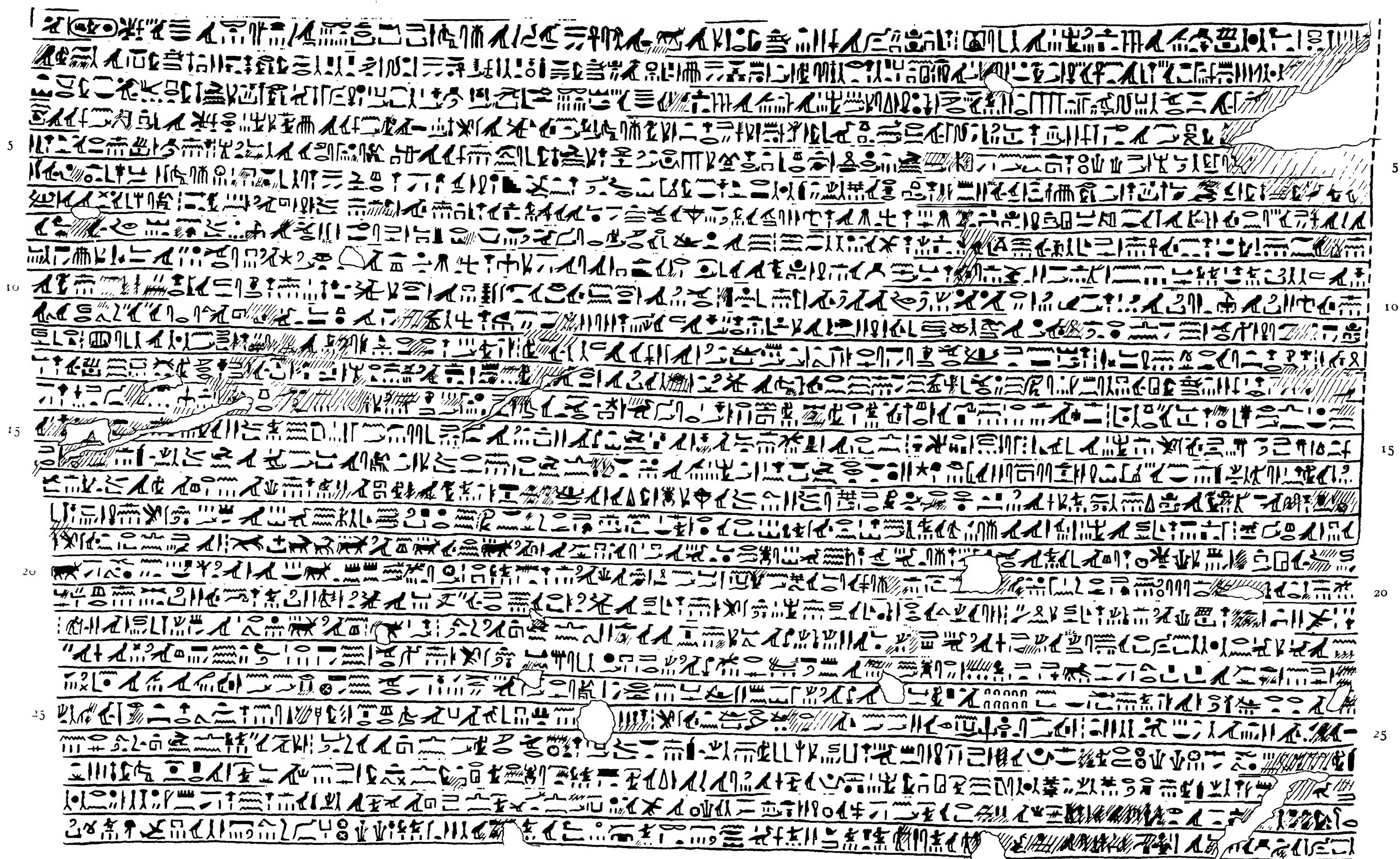
The King, Rightful Successor to Osiris, approved by the Gods, Pl. xl.

The good god, son of Osiris, avenger of Onnophris, profitable seed of the Lord of the Sacred Land. (4) [His father (?) destined him to rule when he came forth from the womb, decreeing³ his reign (while he was yet) on the hands of Isis, Mother of a god; he gave to him the throne of Geb, the goodly office of Him that is in the sky. R̄c formed his Majesty, it was he that

¹ Hakeptah "House of the ka of Ptah," a name of Memphis, and according to Brugsch's suggestion, probably the origin of the name Aegyptus.

² One of the names of Egypt.

³ $\overline{\text{𓂏}}$ for $\overline{\text{𓂏}}$ as usually in this text.



Stela of Seti I at Nauri.

Inscription of the original stela, upper half.

created his beauties, he recognized him as one to be chosen from a million¹ to be king of Upper and Lower Egypt in his place, he moulded him as a champion (5).....noble.... Every god rejoices in him, Upper Egypt and Lower Egypt lay their foreheads to the ground for him. The things which are about him are moulded(?) for him, the circuit of the Aten is under his supervision. The gods have united to protect him and to pacify the heart of Onnophris, they have conducted him into the noble palace. The Ennead goes about rejoicing, their hearts glad, they take pleasure, (saying) "Come thou, (6) Horus (?) son of Onnophris, thou shalt inherit; thou avenger of thy father Osiris Khentamenthes, thou art here (!) established on his throne unto the ends of the limits of eternity. Glad is the heart of the Lord of the necropolis when he seeth thee on the dais² like Rê; for thou art on earth organizing the two lands and making festive the [tem]ples (?)³.

This section cunningly forms the necessary transition from general piety towards the gods to Seti's special devotion to Osiris, given with the approval of all the deities. The king doubtless had, like the god Horus, an hereditary right to the throne which his father and predecessor Ramesses I probably had not possessed. Moreover there was the somewhat delicate subject of his name, compounded as it was with that of the too equivocal Seth. Perhaps both of these considerations urged him from different points of view to cultivate the favour of Osiris.

The King's piety to Osiris of Abydos and his vast foundation there, Pl. xl.

The separation of this section from the preceding is somewhat artificial and the section is far from homogeneous in structure. The beginning continues the speech of the divinities, addressing the king in the second person, but after a number of phrases descriptive of the royal foundation the king is referred to in the third person at line 20, and finally in line 27 appears as speaking in the first person.

Thou scion⁴, thou settest Abydos protected (7) again, and them who are in it flourishing by that which thou hast decreed. Thou buildest his⁵ House like the horizon of heaven, its beams glistening in the face. The shapes of the Lords of Teu-wêr⁶ are modelled, the divine figures resting on their seats, their forms true as (in) the time of Rê, and (with) valuable stones mingled in their barks⁷; (8) thou givest to them M̄c̄it each day, for that it is on which they live; cooling gifts are made for them of sprigs (?) and flowers upon the offering-cakes, and thou bringest them running⁸ water to the place he⁵ wishes, to provision the Lords of the Sacred Land. The palace within it⁹ is much embellished with fine gold true and fresh from the workings¹⁰. When [it]¹¹ is seen, hearts (9)¹² exult and all people make obeisance.

¹ Apparently a popular saying, introduced by *m*, to characterize the person or situation lit. "according-to-the-saying-that 'A person of a million is ahead'"; compare "I sailed up as the son of the count," etc., *m idn s it-j ȝww* "on-the-principle-that 'a man takes the place of his father grown old,'" *B. ni Hasan*, I, Pl. viii, line 8. So also without the *m* in SHARPE, *Eg. Inscr.*, II, 84, line 8. "A man does not betray (?) his chief."

² A throne on a raised platform with canopy.

³ The word written incompletely ??.

⁴ Or "Born, that thou mayest set."

⁵ I.e., Osiris, a chief subject in the previous section, under the names Onnophris, etc.

⁶ The sacred quarter of Abydos.

⁷ Their processional barks bejewelled

⁸ Lit. down-stream.

⁹ Feminine, probably referring not to Abydos, but to the "House" of line 7.

¹⁰ Lit. "of the desert (or foreign land)," apparently meaning gold fresh from the workings as opposed to that which had been used and re-used by jewellers in Egypt.

¹¹ The lost pronoun would be feminine referring to the "House," like those which follow.

¹² Gray's squeezes begin at line 9.

*Its nobility is that which gives it splendour, like the horizon of Rē at his rising. The platform within it is like a plain of silver glistening when one looks¹ upon it. Its gates exceeding great are of pine of the forest, their bodies² (10) are gilded with fine gold and bound (?) with bronze at their back parts; one is invigorated³ when he sees their form. The great pylon-towers are of stone of Anu⁴, the crestings (?) of granite, their beauties join the upper support⁵, they reach⁶ Rē (11) in his horizon. The lake in front of it⁷ is like the Great Green (sea) whose [cir]cuit is not known, when one gazes upon it bright like the colour of lapis-lazuli, its middle part of papyrus and reeds, and lilies abounding daily, and lo a swan (?)⁸ enters to move about; surrounded by (12) trees reaching to the sky, that are set like the pine on its (native) land. The great neshemt-*barge*⁹ enters its lake to convey (?) the Father-of-his-Monument¹⁰ when he is rowed thereon¹¹. Behold he is in exultation and his crew rejoice; the Followers of Horus they too (?)¹² cry "Give unto him¹³ an eternity of Sed-festivals, to double (13) his [years of life] upon earth, accomplishing the reign of Atūm." The halls of natron¹⁴ are greatly purified, they pour forth fresh water anew; encompassed with stone in excellent wor[kmanship], their mysteries attain the height of the first (?) heaven so that one is enclosed therein with willing heart; sprinkling water which is received in¹⁵ the conduit (?) (14) each day without ceasing for it by the hands of skilled ritual-priests, their mouths select, with converse and phrases that please his¹⁶ heart, to provision the Tei¹⁷ for Him¹⁶ who rests therein, and (?) his Ennead endued with breath of life. [The treasures?] are filled (?) with [val]uables, silver and gold in heaps on the ground, (15) royal linen and clothing in (different?) counts, millions of oil, incense, wine, honey, without limit in counting their abundance; as to the frankincense therein of Pwoni¹⁸, it is measured by heaps.*

There are inducted for him¹⁶ prophets and priests, offerers (?)¹⁹.....; (16) a voice announces the functions (?) to²⁰ the Lords of the whole of Kher-neter²¹, awakened at every dawn to perform the Revealing of the Face of the Father¹⁶, millions and hundreds of thousands of every thing pure and good without limit, to offer to the august Father¹⁶, out of that which his very own son gives to him, the functions.....in (?) (17) this temple (?), glorifying the Horizon-god²² in his horizon; they give praise to them that are in heaven, to overthrow the enemy by his path, directing the favourable breeze for Khepri²², placing his bark [on] this pool (?). The crew of Rē are in jubilation, their hearts are content with Mērit.

The storehouses (18) therein contain fat things, the endowments multiply by millions; the slaves therein are of the children of the princes whom he²³ captured in the land of Retnu²⁴, causing each individual to know his duties in all the rules of purity.

He²³ hath offered to him¹⁶ a bird-farm in his marshes, their number like the sands of the shore (19); one sees his¹⁶ House like the marshes of Chemmis clamouring with fattening (?)

¹ A small hole in the rock here seems to have been left blank so that no sign is missing.

² A curious use of this word for an inanimate object.

³ Lit. "grows green."

⁴ *I.e.*, fine Mokattam limestone.

⁵ Or "support of the sky."

⁶ ? *snsn*, cf. BRUGSCH, *Wörterbuch*, 1254, or perhaps *snsn* [n]-*sn* (not *hr-sn*), "Rē associates with them."

⁷ *I.e.*, the Residence.

⁸ Apparently a new bird-name; read *st pw*.

⁹ The bark of Osiris at Abydos.

¹⁰ Perhaps a designation of Osiris, or of the king as builder.

¹¹ Or "to sail, and the Father of his Monument is rowed therein."

¹² *ry* (?)

¹³ The king.

¹⁴ For purification, or for embalming?

¹⁵ Lit. "upon."

¹⁶ Osiris.

¹⁷ Underworld.

¹⁸ Or perhaps "true men."

²⁰ Or perhaps "the commands of."

¹⁹ "Punt" or Arabia.

²² A form of Rē the sun-god.

²¹ The necropolis.

²⁴ The campaign is that which was begun in the first year of the reign.

²³ The king.

and breeding fowl, every bird of the bird-farm; and roasting-birds (?) are produced for him¹ in his house². The stalls are full of fat bulls, kine and oxen³, goats, and oryxes; calves³ are therein in hundreds of thousands; there is no standard (?) for counting (20) their abundance, taxed [for offerings?] at their dates by the rule of divine matters.....the ordinances [of] his Fashioner. He⁴ has put forth Mērit to his¹ ka that he¹ may offer to him⁴ the circuit of the Aten besides the serfs of his¹ temple.

He has made to abound for him all stocks of all animals which traverse the earth; the bulls (21) mount, the herd (?) receives increase; the herbs multiply in leafage, the stalks (?) come⁵ in due season, they multiply millions, and their numbers increase anew, given to them outright (?) anew⁶. The herdsmen look after their gangs, under their hand (22) from son to son for ever and always. There is given to them herbage in goose-retreats (?) and in marshes, leaves and flowers; this land is left to them as roaming-ground⁷, none is ever commandeered (?) upon it⁸. Bulls and oxen are scattered in the bushes and (on the) banks; the old class (?) (23) is filled (?) with them and the herds are full with dropping of young, calves following after their mothers belonging to them.

Fleets (?) of boats are created for him¹ to cause drug-herbs to abound in his temple, their numbers have covered the Great Green and the river mouths are crowded with boats (24) and [k]erer-ships, provided with their crews, each one of a hundred cubits, the[ir] freights of drug-herbs of God's Land⁹; they moor at the noble quay (?) to provision the desert-borders (?) of Ta-wêr¹⁰.

He⁴ has made for him¹ lists in hundreds of thousands, of low ground, (25) islands, high ground, all land profitable for crops, that he may count them offered to his ka.

He has made for him kerer-ships to convey each crop. The granaries are swollen with corn, and their heaps reach the sky.

A decree has been made and ordinance given for¹¹ (26) its¹² serfs throughout the districts of Upper and Lower Egypt; all its people are privileged and protected¹³ like the for-geese¹⁴ on the banks that they desire, all their occupations being devoted [to] his ka upon the great nome (?) that he loved; they shall not be commandeered by others and there shall be no interference with them, (27) from son [to son, es]tablished in their occupations to the ends of the limits of eternity.

I¹⁵ have purified my House millions of times and I have privileged those who are in it again. I have set the serfs, whom I have produced, in my House; I will not separate from them. I began therein from my childhood until (28) my rulership (?).....I gave

¹ Osiris.

² Or "estate."

³ The meaning of the different terms for cattle is difficult to define.

⁴ The king.

⁵ Or "the old stocks sprout."

⁶ Or "there are given to them ...s again."

⁷ See SPIEGELBERG, Israel stela, line 24, GARDINER, *Admonitions*, 67.

⁸ Cf. l. 26.

⁹ Arabia.

¹⁰ The Thinite nome in which Abydos lay.

¹¹ Lit. perhaps "have been commanded," "regulated" or "commended to protection," "safeguarded"; see lines 30, 83, 98.

¹² Fem., i.e., "of the House."

¹³ For these words and for references in the inscriptions to protective decrees, see SPIEGELBERG, *Zur Geschichte des Tempels des Horchontechthai zu Athribis* in *Rec. de Trav.*, xxix, 53-57. There is nothing to prove that the protection accorded by the decrees was definitely extended to malefactors or even to runaway slaves (cf. Herodotus, ii, 113 for a pre-Ptolemaic instance), but it is obvious that the punishment of such, if they attached themselves to a temple, would be surrounded with difficulties for anyone outside it.

¹⁴ Sacred to Amūn, and by nature wary and elusive.

¹⁵ The king here speaks.

unto him the entire land of Upper Egypt as food(?)¹ for his kas. I will not tire, I will not forget any of the ordinances, on water or on land, surely and fixedly for ever (29) and eternally.

The Decree, Pls. xl—xliii.

Lines 29—end. Two squeezes are practically complete for all except lines 60–67, for which Gray gives only a hand-copy.

A fragment of a similar decree, probably of the time of Ramesses III, is on a block built into the quay at Elephantine²; the beginning of the decree (which was in favour of the local temple or temples) is helpful in establishing the injured formula in the present case.

In spite of many worn and injured passages, innumerable repetitions make most of the inscription easy to copy and complete, so that few sentences are left in which remains of writing are visible but are not yet restored with certainty; to reach the full and exact meaning of the titles and technical terms employed in the decree is not yet possible.

Decree addressed in the Majesty of the Royal Court L.P.H. on this [day] unto³ the wazîr, the high officers and courtiers, the judicial council⁴, the viceroy⁵ of Cush, the chiefs of foreign contingents, the superintendents of gold, the mayors and the controllers of camps⁶ of Upper and Lower Egypt, the equerries, the chiefs of the stable, the fan-bearers, every inspector⁷ (30) belonging to the king's estate, and every person sent on a mission to C[ush]. The decree saith:

His Majesty hath commanded that ordinance be made for the House⁸ of Millions of Years of the Rush and Bee-King Men-maṣ-rēc, "the Heart is at Ease in Abydos⁹," on water and on land throughout the nomes of Upper (31) and Lower Egypt

to prevent interference with any person belonging to the House (etc., full name) in the whole land, whether man or woman;

to prevent interference with any goods (32) of this estate in the whole land;

to prevent [the taking of any peo]ple belonging to this estate by capture from (one) district for (another) district by corvée¹⁰, as impressed(?) for ploughing or impressed for harvesting, by any viceroy, (33) any chief of foreign contingents, any mayor, any inspector, or any person [sent on a] mission [to] Cush;

to prevent their boat being stopped on¹¹ the water by any patrol¹²;

¹ Or "as the original possession of his ka."

² See below, p. 207.

³ Rougé indicates *m [hrw]pn n* in the Elephantine decree where Jéquier corrects to *m hr n*, but the latter is an improbable reading. Our text is indecisive.

⁴ Cf. *Zeitschr. f. äg. Spr.*, xvii, Pl. i, line 16; lit. "council of hearers" or perhaps "councils and judges."

⁵ Lit. "king's son": this and the next two classes, appropriate to Nubia, are omitted in the Elephantine decree, which follows on with "the mayors" etc.

⁶ *I.e.*, mayors of towns and controllers of Bedawi camps.

⁷ *I.e.*, "steward" or "factor" of a landed estate.

⁸ More literally "that the House be caused to be sanctioned (?) by law."

⁹ To save wearisome repetitions the name of the House is suppressed in the translation, this full form of the name being marked as "(etc. full name)" where it occurs, and the usual short form (line 44) indicated by "(etc.)" alone: see below, p. 205.

¹⁰ Or "(or) by agreement (?), (or) by corvée of ploughing or corvée of harvesting"; see BURCHARDT, *altäun. Fremdwort.*, 365, also the new *Wörterbuch*, I, 465, 467.

¹¹ Or "prohibited from."

¹² *šncy*, see GARDINER, *Grammar*, 301.

to prevent interference with any land belonging to the House (34) of Men-mat-rē "the Heart is at Ease in Abydos¹," in the country parts.....[in] their [journeys?]², by any Viceroy, any chief of foreign contingents, any inspector belonging to the house of inspection (sic)³ of the king's estate, or (any) person sent on business to Cush;

to prevent kine, (35) asses, dogs, goats, any single animal⁴ belonging to the House (etc., full name) being taken either by robbery or by way of privilege(?)⁵, by any Viceroy, any chief of foreign contingents, any mayor, (36) [any] equerry, any [chief] of the stable, any chief of Nubians, [any] inspector [belonging to the king's estate?] or any person sent on business to Cush;

to prevent interference with any catcher belonging to the House (etc., full name) (37) on his trapping⁶ marshes and his fishing waters⁷ and on the land to annoy(?) him; to prevent approaching unto any fisherman belonging to the Residence (etc.) (38) on his fishing pools which are in any part of the land⁸ of Cush, by any Viceroy, any chief of foreign contingents, any mayor, any inspector belonging to any part of the land⁸ of Cush;

to prevent interference with any underlings belonging to the House (39) (etc., full name) who are in the land of Cush, whether men or women, whether guardians of land, inspectors, bee-keepers, cultivators, gardeners(?), vintners(?), (40) bargees⁹, packers⁹, foreign traders, staff of the gold-washing¹⁰ and(?) boat-building¹¹, or any one who carries on his occupation in the House (etc., full name); but rather that they shall be (41) privileged and protected, each one of them pursuing his calling, which is carried on in the House (etc., full name) without their being disturbed by any Viceroys (sic) (42) of Cush, any chiefs of foreign contingents, any high officers, any equerry, any chief of stables, any fan-bearers, any army officer or any person sent on a mission to Cush.

As to¹² any Viceroy of Cush, any chief of foreign contingents, any mayor, (43) any inspector or any person who shall take any person belonging to the House (etc.) by capture from (one) district for (another) district, by corvée(?) as impressed(?) for ploughing (44) (or) impressed for harvesting;

likewise he who shall take any woman or any person belonging to the House (etc.)—likewise their slaves—by capture to do any work (45) whatsoever¹³;

likewise any equerry, any chief of the stable, any person belonging to the king's estate sent on any mission of Pharaoh L.P.H. who shall take any person of the House (etc.) (46) from (one) district for (another) district by corvée(?), as impressed for ploughing or impressed for harvesting—likewise to do any (kind of) work—

punishment shall be done to him by beating him with two hundred¹⁴ blows and five¹⁵ pierced wounds (47), together with exacting the work of the person belonging to the Residence (etc.) from him for every day that he shall spend with him, to be given to the House (etc.).

¹ This is the short form of the name.

² Or "by [trampling?] them."

³ Apparently a scribal mistake is here in the original: one would expect only "any inspector of the king's estate."

⁴ Or "any kind of animal."

⁵ Or "of wantonness," or "of taking a liberty," "of appropriation."

⁶ I.e., "fowling."



⁷ Not *scow-f* as in the next line; apparently *mw-f*.

⁸ Lit. "the whole land."


⁹ The first element in each of these compounds is uncertain.


¹⁰ See *Rec. de Trar.*, XIII, Pl. II, lines 2, 6, etc. = *Journal*, IV, 247.

¹¹ Or "joinery."

¹²  scribal error for .

¹³ Lit. "that is in the whole land."

¹⁴ Perhaps for the sake of clearness, hundreds are written in multiples of ten  throughout this text.

¹⁵ The  at the end of the line is not to be counted, five being the regular number of wounds in punishment; see also the Decree of Harehab, line 28. In an oath, ERMAN, *Zwei Aktenstücke*, p. 335 (cf. BLACKMAN in *Journal*, XII, 179), "100 blows, 50 wounds" seems to occur: if correctly read it might be an exaggeration of the typical number or a mistake of writing.

As to (48) any Viceroy, any chief of a foreign contingent, any mayor, any inspector, any high officer, any person sent on a mission to Crush who [shall] stop any boat¹ belonging to the House (etc.)—likewise any boat of any inspector belonging to this estate—and (49) moor it for even² one day, saying, “I will take it as commandeered from him for certain³ business of Pharaoh L.P.H.,”

punishment shall be done to him by [beating him] with two hundred blows and five pierced wounds (50), together with exacting the work of the vessel from him for each day that it shall be moored, to be given to the House (etc.).

Now as to any high officer, any superintendent of land belonging to this estate, any keeper (51) of plough-oxen⁴, any inspector who shall interfere with the boundary of lands belonging to the House (etc.), to move their boundaries,

punishment shall be done to him by cutting off his ears, (52) he being put to be a cultivator in the Residence (etc.).

Likewise any person in the whole land who shall attack⁵ any catcher belonging to the House (etc.) (53) at his trapping-marshes or at his fishing pool,

punishment shall be done to him by beating him with a hundred blows and five pierced wounds.

Now as to every person who shall be found (54) stealing any goods belonging to the House (etc.),

punishment shall be done to him (by) beating him with a hundred blows and exacting the property belonging to (55) the House (etc.) from him as stolen property(?)⁶, at the rate of a hundred to one.



Likewise his majesty hath decreed that ordinance be made for the stock of kine, the stock of (56) goats, the stock of asses, the stock of dogs, the stock of geese, the stock of.....⁷ belonging to the House (etc.), on water (57) and on land,

to prevent interference with any individual of a herd of them,

to prevent interference with their⁸ herdsmen,

to prevent the taking of cattle, asses, (58) dogs, goats, any individual of a herd of them, by commandeering or by privilege,

to prevent any superintendent of [cattle], any superintendent of hounds⁹, any herdsman belonging to the House (59) (etc.), taking ox, ass, dog, or goat belonging to the House (etc.),

¹ The parallel in line 33 gives the reading of  as *im*; see also the Elephantine decree, line 4. Presumably this value belongs to  in some earlier instances.

² Lit. “only.”

³ Lit. “any.”

⁴ “*my* (Asiatic?) of ploughing”; probably the earliest instance of this interesting word in connection with cattle and ploughing, a common use in demotic, cf. SPIEGELBERG, *Rec. de Trav.*, XXVIII, 201.

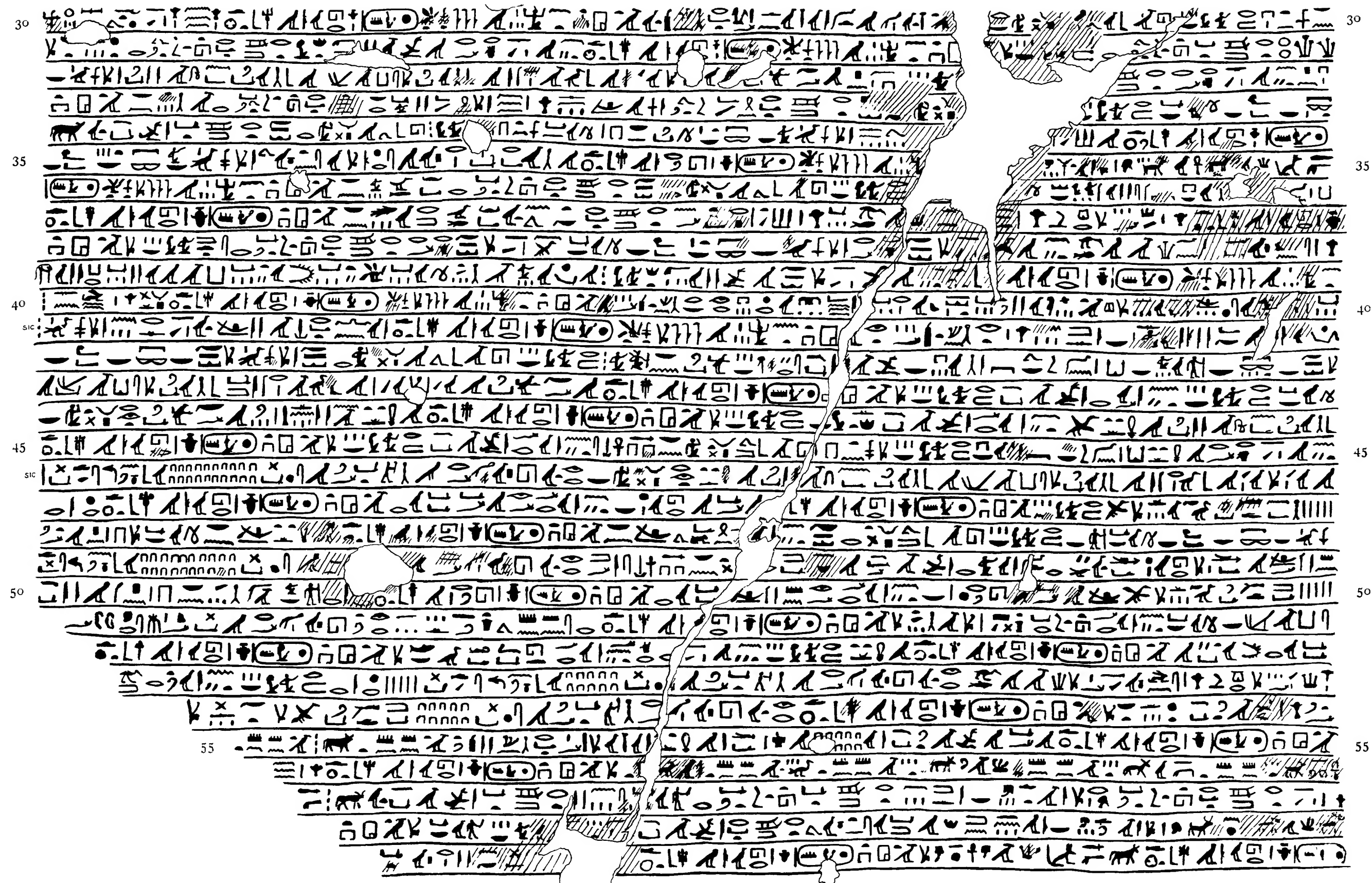
Or “drive off...from his trapping-marshes.”

⁶ Or “as forfeit” (?). So also Decree of Haremhab, line 28, and cf. the phrase quoted in SPIEGELBERG, *Studien und Materialien zum Rechtswesen des Pharaonenreiches* at the top of p. 77.

One might expect “every animal” here, but such a reading seems impossible.

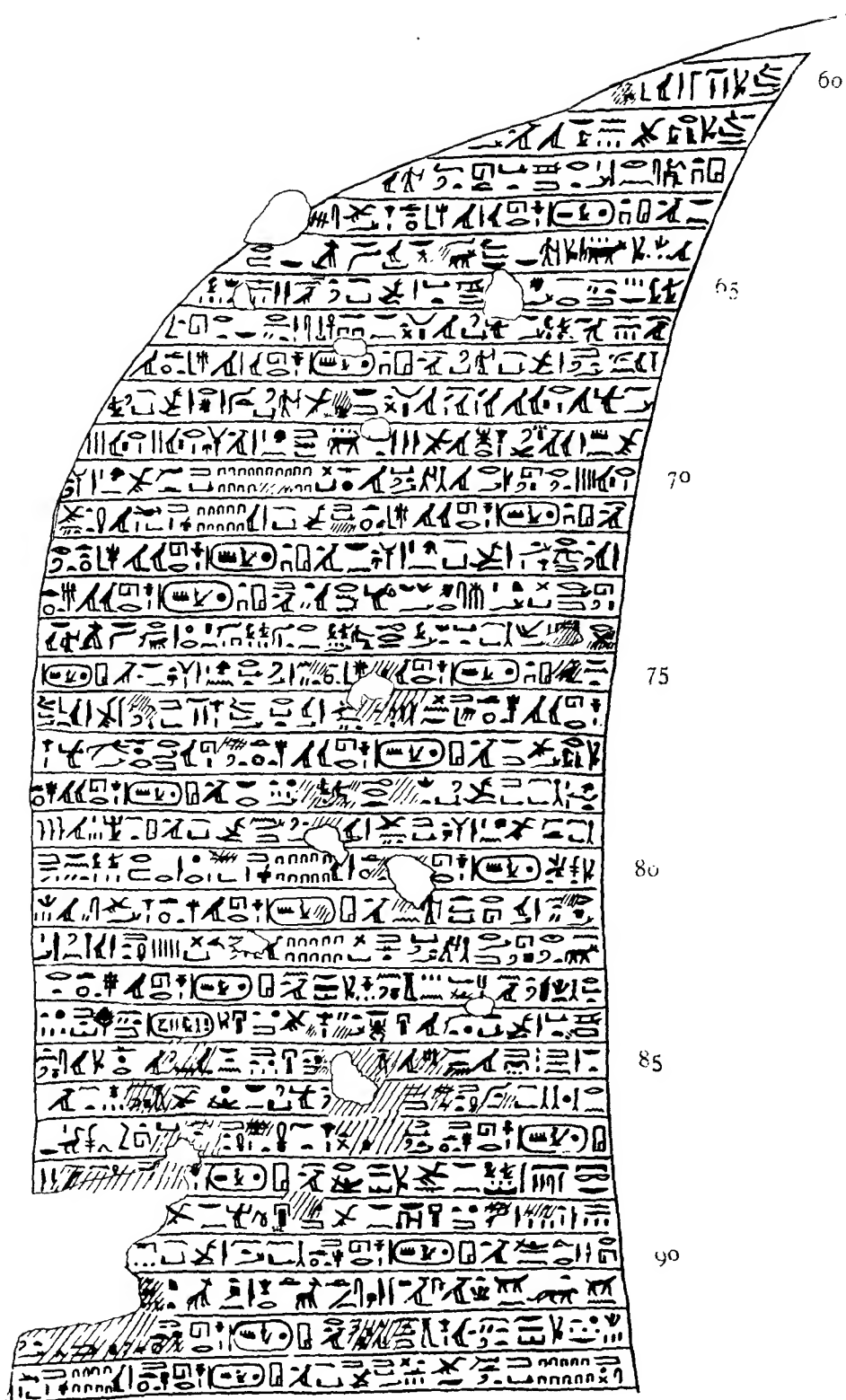
⁸ This curious form of the 3. pl. suffix pronoun *-sny* (cf. *n-sn-imy*) occurs also in the Elephantine decree *im-sny* “their boat,” line 4, *n-sny* “belonging to them,” line 5, and is seen in a good period of the Eighteenth Dynasty in the proper name *Nb-sny*. Cf. also *mwt-sn iry* in line 23.

⁹ The word translated “hounds” in this title is probably *iw* (see line 94, also lines 64, 74), and is different from that rendered “dogs” in the lists of animals in lines 35, 56, etc., which is *š*, but it is not clear that either name is specially applicable to hunting dogs.



Stela of Seti I at Nauri.

Inscription of the original stela, lower half.



Stela of Seti I at Nauri.

Inscription on the added portion, upper half.

[to give it by defalcation] to another¹; or causing (60) it to be offered to (some) other deity and not be (61) offered to Osiris their Lord in his (62) noble House which his Majesty hath made;

to prevent attack on² any herdsman (63) belonging to the House (etc.) at his herbage (64) for cattle by any high officer, any mayor, any superintendent of cattle, any agent, any superintendent of hounds, (65) any person whatsoever;

[to] prevent the taking of their women (66) or their servants, captured, in any work of Pharaoh L.P.H.

As to anyone who shall transgress (67) this decree and take a herdsman belonging to the House (etc.) by (68) capture, or from (one) district for (another) district in any work, and the herdsman shall say "Verily since such an one took me (69), loss has resulted in my herd of one head of animals or two or three (70) or four,

punishment shall be done to him by beating him with two hundred blows and exacting the head of animals (71) belonging to the House (etc.) from him [as] stolen. at a hundred to one.

Likewise, (72) he who shall be found taking any head of animals belonging to the House (etc.),

(73) punishment shall be done to him by cutting off his nose and ears, he being put as a cultivator in the House (etc.) (74) in exchange(?) for his crime(?)³, and putting his wife and children as serfs of the steward of this estate.

And as to any keeper of cattle, any keeper of hounds(?), any herdsman (75) belonging to the House (etc.) who shall give any head of animals belonging to the House (etc.) (76) by defalcation to another; likewi[se] he who shall cause it to be offered on another direction(?), and not be offered (77) to Osiris his Lord⁴ in the House (etc.),

punishment shall be done to him by casting him down and placing him on (78) the end of a stake⁵, forfeiting(?) his wife and children and all his property to the House (etc.) (79) and exacting the head of animals from him to whom he shall have [given] it as stolen from the House (etc., full name) (80) at the rate of a hundred to one.

And as to any person that is in the whole land (81) who shall assault a herdsman belonging to the House (etc.) on his herbage (82) for cattle,

punishment shall be done to him by beating him with a hundred blows and five pierced wounds.

Moreover his majesty has decreed (83) that ordinance be made for the fleet of the tribute of Cush belonging to the House (etc.)

to (84) prevent any superintendent of a fort who shall be over the fort of Seti-Maineptah which is in Sekhmet⁶ from taking away anything (85) from them of gold, of pelts⁷(?). of [any (kind of)] tri[bute?] of a fort, of any goods of.....in the manner of privilege(?) (86) for ever and ever:

¹ For the restoration see lines 74-76. The first part is very obscure.

² Or "driving off of any herdsman...from his herbage."

³ Or "to drive(?) his plough(?)."

⁴ Or "its owner."

⁵ Impaling as a punishment is referred to also in Pap. Abbott, VI, 12-13, "Crimes punishable by mutilation and impaling"; Rosetta, dem. I. 16 = Nebireh, I. 23.

⁶ Apparently not otherwise known. The initial sign can hardly be anything else than a variety of the sistrum *shm*.

⁷ *šd*, hardly *mh* "flax."

likewise to pre[vent the takin]g of any sailor belonging to a barge of the tribute of the (87) House (etc.) to put him [to do] work on another route;

likewise to pr[event] interference by any Viceroy, (88) any chief of a foreign contingent, any chief of Nubians belonging to the land of Cush, with a boat belonging to the House (et[c.]), together [with] their [sic?] (89) crews(?).

As to any superintendent of the fortress, any scribe of the fortress, any inspector belonging to the [fortress who] (90) shall go on board a boat belonging to the House (etc.) and shall take gold, [ivory; ebony?], (91) skins of leopards, skins of shawashti¹, giraffes' tails, giraffes' hide, (92) -herbs, any goods of Cush which are brought as tribute to the House (etc.),

puni[shment shall] be [done to him] by beating him (93) with a hundred blows, and the things² shall be exacted from him as forfeit(?) of the House (etc.) at the rate of eighty to one.

(94) Now as to every Viceroy, every superintendent of dogs, every inspector, every scribe belonging to the land of Cush who shall make free of a vessel belonging to the House (etc.) and (95) take any goods from it—likewise he who shall take any(?)³ officer of a barge belonging to the House (etc.) to (96) despatch him on business.....—,

punishment shall be done to him and the goods shall be exacted from him as the forfeit(?) to the House (etc.) (97) and the [day(?) of the captain] shall be exacted [from him at the rate of.....days for?] every [day] which he shall spend with him.

Likewise his majesty hath decreed (98) that ordinance [be made for the.....] priests, lectors, temple workers, (99).....[the whole staff of the.....] in all their kinds,

to prevent interference (100) [with them, their people or any of their property by anyone in the land];

[to prevent the taking of any one of them, likewise] their women and their slaves (101) [by capture from one district for another district by corvée as impressed(?) for ploughing or impressed(?) for] harvesting by any magistrate, any mayor, or any person who (102) [is in the whole land].



[As to any one in the whole land who shall interfere] with them or any of their people or any of their property,

(103) [punishment shall be done to him by beating him with a hundred blows and five pierced wounds?].


But if there result a loss of any goods belonging to the House (104) [(etc.), the loss must be made good?];

[and if] any person belonging to the House (etc.) [complain] (105) [to any council that is in any city(?) saying] a certain [inspect]or, a certain equerry, a certain chief of stables, [a certain] officer (106) [hath interfered with me, and hath taken my goods from me, they shall exact] the things which shall be deficient from him, (107) [and he shall recover the goods from the man who has] interfered with him.

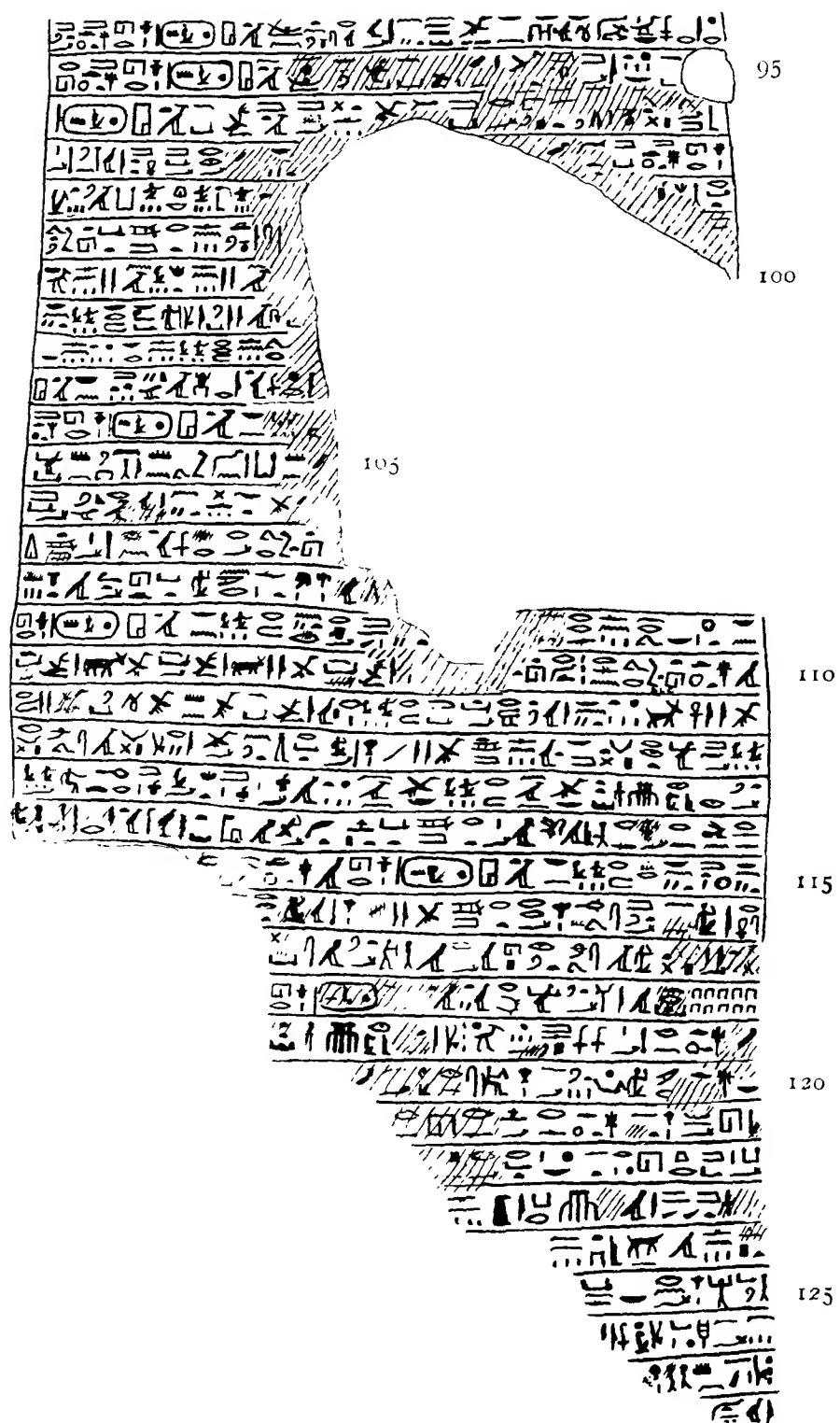
But his majesty hath avoided causing⁴ (108) [him that molested them to be cast on the ground and] put on the end of a stake, desiring to let him be convicted in any council (109) of any city to which they go.

¹ In this new word it seems impossible to decide whether *hawashti* or *shawashti* is to be read (there is a similar doubt in line 28);  occurs in lines 17, 21, 38, 53, ꜥꜣꜣ in lines 18, 22, 35, 37, 53, 56, 58, 59. Moreover the  is small and possibly accidental.

² *kt* for the usual *akt*, also in line 106.

³ Or "an officer," omitting the uncertain .

⁴ Lit. "not caused."



Stela of Seti I at Nauri.

Inscription on the added portion, lower half.

[And as to] any people in the whole land to whom any person belonging to the House (etc.) (110) has come¹ saying ["a certain....."] interfered [with me] and took my ox; *he took the ox*, or he took (111) my goat or any thing which is stolen from people," or "such an one, the inspector, has taken my man (112) by capture(?) to do some work," and they fly not at his word to have his opponent brought in haste in order to try (113) him, Osiris Khentamenthes, the owner of the person, the owner of the goods, shall pursue him² and his wife and his children (114) to blot out his name, to annihilate his soul, to prevent his corpse from resting in the necropolis.

But(?) as to a member(?) of any court(?) (115) that is in any city to whom any person belonging to the House (etc.) shall³ go (116) to complain to him and he turn not⁴ his face to him, so that he fly not at the voice to try (117) his cause⁵ swiftly, punishment shall be done to him by beating him with a hundred blows (118), he being deprived of(?) his office and put as a cultivator in the House (etc.) (119).

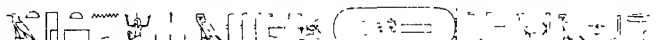







Epilogue. (Lines 120—end.)



His majesty has done this as his acts of piety for his father Osiris Khentamenthes (120) Lord of Abydos, desiring to privilege them for him, for the noble thing that I (sic!) have done for him in (121).....for him; for(?) Abydos is destined to conciliate him, to content (122) his ka, in the daily course of each day, to cause him to.....(123).....in(?) the two lands.....them who are in their shrines, (124) that they may rest in their places (125), rejoicing in all he⁶ has done; that they may give (126) to him the duration of Rē, the rule (127) of the land, twice(?) lasting and enduring (128) for ever.

The final phrases seem to have been clumsily shortened to fit the space; properly expressed they would have run somewhat thus:

"That they may give to him the duration of Rē, the rule of Atūm over the two lands(?), lasting (twice) and enduring (twice) for ever and ever."




The purpose of the decree is to safeguard the rights of a great royal foundation, and of all individuals and property connected with it. But the precise nature of this foundation is not quite clear.



First as to the name and situation. The name of it is written in the decree itself fully  (lines 35, 36, 39, 40, 41 and 79-80) or with the omission of  (lines 30, 31, 37, 40), but in line 34 and everywhere after line 41 (except lines 79-80) it is always abbreviated to  with only graphic variants. In the full form it appears as if  were to be taken with the masculine word *ib* "heart" as opposed to  with the feminine word , but at this period the masculine form of gender cannot be treated as an altogether safe guide, especially as  is here separated from  by a long epithetal phrase. Two translations thus are possible, either "The House of millions of years of king Men-mac-rē, 'Heart's ease,' in Abydos," or "The House of millions of years 'The Heart of king Men-mac-rē

¹ The text has "with whom any person etc. has interfered": evidently a scribal error substituting  for .

..... These words should probably be omitted as an erroneous repetition.



² A similar curse terminates the decree of Seti I at Wadi el-Abbād (Gunn and Gardiner in *Journal*, iv, 248).

³  for , unless  is intended, "hath gone." (cf. line 109).


⁴ The word means "be deaf," and  is presumably a false transcript of the hieratic sign for .

⁵ Lit. "do his trial" or perhaps "do his business."

⁶ The king.

is at Ease' in Abydos," and for the short form "The House of Men-maꜥ-rēꜥ · Heart's ease' in Abydos," or "The House 'The Heart of Men-maꜥ-rēꜥ is at Ease' in Abydos." The seals from the Ramesseum (see below), enclosing the royal name in the sign of the "House" , turn the scale in favour of the first rendering. We may further question whether "in Abydos" is to be taken as describing the situation of the House or of the "heart" at "ease," and I do not see any decisive argument in favour of one version rather than another. In the last alternative, such a name as "The House of Men-maꜥ-rēꜥ 'Heart's ease in¹ Abydos'" might have been given to some establishment of the king at or near Nauri, commemorating his contentment in distant Abydos, and this would agree with the fact that the decree at Elephantine concerns the local temples. Mr. Gray indeed saw at Nauri the remains of an ancient settlement, and for all we know Seti I may have chosen Nauri as the site for his principal monument in Nubia, even as Amenophis III chose Soleb and Tutankhamūn Faras. Notwithstanding all this it seems fairly certain that the "Residence" of the Nauri decree was really at Abydos; for the long description of the king's work for Osiris in the earlier lines contains no reference to any establishment elsewhere, and it would be a natural precaution to post up this protective decree in Nubia if Seti's great foundation at Abydos collected thence large revenues of gold and other products of the South. We may take it in fact that the "House" of the decree itself is identical with the "House" at Abydos described, though with no special name, in the preliminary matter. Here the first mention is in line 7, "Thou buildest his House," *i.e.*, the House of Osiris, and "his House" occurs similarly in line 19, but in line 27 the king speaks of "the House of Men-maꜥ-rēꜥ" very naturally as "my House," and he uses the same words in the inscriptions on his temple at Abydos and on the temple at Wādī el-Abbād², each of which had the name "the House of Men-maꜥ-rēꜥ." In the decree itself (line 62) we read once "his (Osiris') noble House which his majesty made." It is curious that the expression  "God's House," usual for a great temple-establishment, does not occur in the inscription, but it seems clear that "the House" includes the temple with all its appurtenances. Within it was a "palace" (line 8), presumably for the king's accommodation.

The well-known temple of Seti I at Abydos, dedicated to Osiris, is celebrated for its fine sculpture and good preservation, but the description of the Residence on the stela would hardly tally with it: in particular we cannot fit in the granite *wmt* of line 10 (whatever they were) as the whole temple is built of limestone. Moreover the name of the "House" on the stela is not found amongst the names given to Seti's temple in the published inscriptions from that monument³. The stela is dated in the year 4, when the temple can hardly have been more than begun, for Ramesses II had to finish it after his father's death: one might indeed suppose that the description of the great foundation was a vision of the future rather than a reality. On the other hand Frankfort's researches for the E.E.S. have shown that Seti I also built the so-called "Osireion." It is quite likely that he made his own residence at Abydos and rebuilt, refurnished and re-endowed the ancient central temple on a magnificent scale after the neglect of the Akhenaten period, and then later began his funerary(?) temple. Thus the description on the stela might be referred to the earlier of these great undertakings at what was now a royal city.

¹ Not "concerning," which would be expressed by .

² See the translations by Gunn and Gardiner in *Journal*, IV, 247, 248.

³ It is seen elsewhere only on two sealings of oil-jars—for *bek* and *neheh* oils—from the Ramesseum. (QUIBELL, *Ramesseum*, Pl. xi, 9, 10.)

The Decree of Elephantine.

Some sixty years ago the Vicomte E. de Rougé copied the inscription on a temple block built into the quay wall at Elephantine¹, part of a decree safe-guarding the temple or temples of the local god Chnum, apparently emanating from Ramesses III. It was translated and commented upon by Spiegelberg in 1892². In the following year de Rougé's copy was reproduced by de Morgan in his survey of the monuments in Upper Egypt about the First Cataract³. In 1902 Sethe retranslated it, recognizing that it contained references to the border-land of Nubia, afterwards known as the Dodecaschoenus, under the name of "The Field" or "The Country"⁴. In 1906 Breasted published a translation of it in his *Ancient Records*⁵. The complete decree of Nauri puts this fragment in a clearer light; for the present translation I have utilized some corrections of the copy furnished by Jéquier⁶; a collation with the original and a search for further fragments would be very desirable.

The block shows portions of eleven horizontal lines of which the first two belong to the introduction, the decree itself beginning in the third line at the middle of the block. A restoration of the first paragraph (lines 3-4) on the analogy of the Nauri inscription, though questionable in detail and perhaps too long, serves to show how small a portion of each line survives.

Decree addressed in the Majesty of the Royal Court on [th]is day⁷ unto the wa'îr, the high-officers, the courtiers, the judicial council, the mayors and the controllers of camps [of Upper and Lower Egypt, the equeries and the chiefs of the stable, the fan-bearers, every inspector(?) belonging to the king's estate and all persons sent on a mission to the Country⁸. The decree saith:—]

[His Majesty hath commanded that ordinance be made for the temples of Chnum Lord of Elephantine?]⁹

4 *[to prevent the taking of any people belonging to these temples by any riceroy, any mayor,] any inspector belonging to the king's estate or any person sent on a mission to the Country to prevent their boat being stopped on the water by any patrol¹⁰*

to prevent taking a boat belonging to them by commandeering to do any business of Pharaoh L.P.H.¹¹, by any person sent on a mission [to the Country] [etc., etc., etc.]

5 *[to prevent taking any cattle], any head of animals belonging to them by commandeering or(?) by robbery or by(?) privilege(?)¹², by any mayor, any inspector, any officer sent on a mission to the Country.*

As to anyone who shall do it, there shall be erected from him the head of animals which he shall have taken.....

[etc., etc., etc.]

¹ E. DE ROUGÉ, *Inscriptions hiéroglyphiques*, CCLVI—CCLVII.

² SPIEGELBERG, *Studien und Materialien zum Rechtswesen des Pharaonenreiches*, 94-96.


³ *Catalogue des monuments et inscriptions*, I, 118, block c.

⁴ SETHE, *Untersuchungen*, II, 82-84 (*Dodekaschoinos*, 26-28).


⁵ *Egypt*, IV, 85-87.

⁶ *Sphinx*, XVI, 3-6 (1912).

⁷ So de Rougé; Jéquier's correction *m hr n* is very improbable.

⁸  as in lines 4, 5. The Nauri decree has "Cush" where this has "the Country": Sethe must be nearly if not quite right in identifying the latter with the Dodecaschoenus.

⁹ Cf. Nauri, lines 29-30. That the local temples were dealt with in the decree is clear from line 6.

¹⁰ Nauri, line 33, where  is given as the full spelling of *ak*.

¹¹ Nauri, line 49.

¹² Nauri, lines 57-58.

6 [to guard and protect any serfs belonging to these temples, whether men or women, whether.....] fishers, fowlers, natron-gatherers or salt-gatherers or any that pursue their callings for(?) the temples of the Father of all gods and goddesses¹, without permitting them to be molested² by [any] people [in the whole land]

[etc., etc., etc.]

7 [As to any serfs.....any] bee-keeper(?) or any person belonging to the god's Residence who shall be interfered with, and shall say "a certain inspector or a certain officer interfered with me: he it is that caused the loss which has taken place³," they shall give(?) the..... which shall have been taken, as forfeit, to the god's Residence of the Great God.

Also to prevent the assembling(?) [etc., etc., etc.]

8their owners, cultivating for them, unto their divine offerings.

Also to prevent any.....or any person from taking any person or any.....belonging to any god or any goddess, to give him(?) to another by exchange or by way of robbery [etc., etc., etc.]

9shall be exacted from him as forfeit(?)

Likewise his Majesty hath decreed to prevent any future(?) wazîr(?) demanding(?) anything from(?) any prophet(?) belonging to these temples, of silver, gold, fine linen, clothing, unguents [etc., etc., etc.]

10likewise anything that is stolen from them; but that all the people belonging to the temples stay established in their places, pursuing their callings (for) their gods therein⁴

[etc., etc., etc.]

11without my(?) giving him anything as their equivalent(?). If robbery shall take place in regard to any property belonging to any prophet(?), and he shall produce a writing.....it shall be exacted from him, or if people belonging to.....take.....⁵

The above is block *c* in de Morgan's Catalogue. Block *g*⁶, a corner block, shows on one face scraps of nine horizontal lines, the third containing the phrase

"to prevent the taking of kine, asses....."

and on another, nine vertical lines of inscription, the first two of which are from the end of a decree and are followed by a long epilogue.

1 [anyone who has taken any person belonging to] any god's House to put him under him in any business of his, punishment shall be done to him, he being put.....

2to take any goods or any person from them. His Majesty did this in seeking out profitable things.....

3performing good works after justice was established in this land, to pacify the gods, to satisfy.....

Block *i*, one side of which is shown again as block *d* = de Rougé, CCLVIII⁷, is another corner block with ten and nine horizontal lines on the two sides; it probably belongs to the record of the same decree, and gives the name of Ramesses III.

¹ *L. Khnum*: see SETHE, *op. cit.*, 83. LANZONE, *Dizionario mitol.*, 957.

² Nauri, lines 38-42.

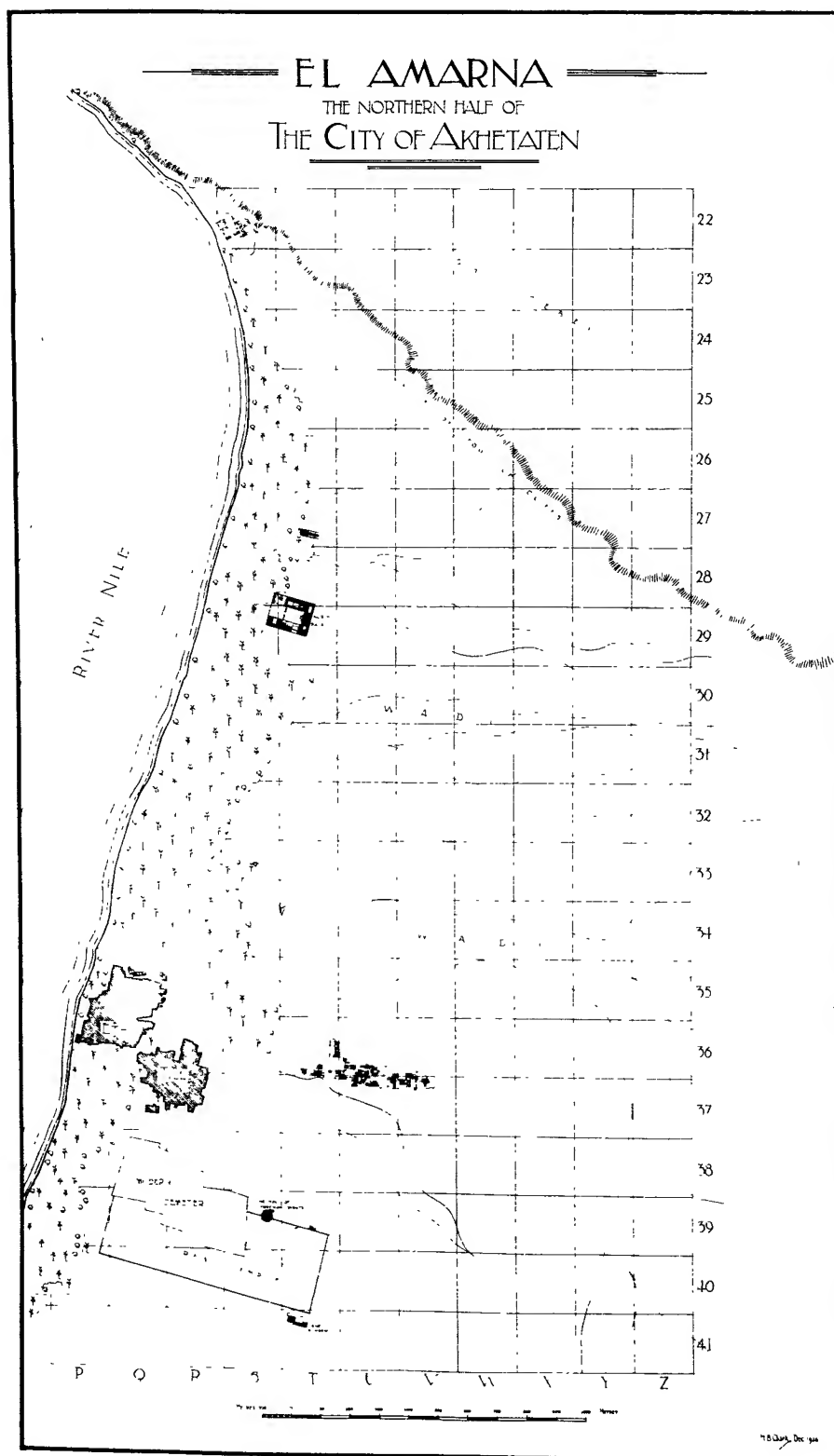
³ Cf. Nauri, line 105.

⁴ Cf. Nauri, line 41.

⁵ The last line is shown only in Jéquier's copy and is very obscure.

⁶ MORGAN, *Catalogue*, I, 120; corrections in JÉQUIER, *ibid.*, 8.

⁷ Corrections in JÉQUIER, *ibid.*, 8.



Plan of the northern portion of the city of Akhetaten.

PRELIMINARY REPORT ON THE EXCAVATIONS AT TELL EL-'AMARNAH, 1926-7

By H. FRANKFORT

With Plates xliv—liv

The time at our disposal this year for work at Tell el-'Amarnah was very limited, for a large amount of collating and copying had still to be done at Abydos in the Cenotaph of Seti I. We remained at 'Amarnah for just over two months, and that the most could be made of that short period was due to the fact that the expedition was fortunate enough to include amongst its members Mr. S. R. K. Glanville and Mr. H. B. Clark, both thoroughly acquainted with the peculiarities of the site. Moreover, Professor Whittemore assisted us for several weeks while completing his notes on the North Palace. Mrs. N. de Garis Davies, and for some time also Mr. Davies, stayed with us to finish their facsimile copies of the unique paintings from the Harim of the North Palace, and as we had decided to attempt the removal of these paintings it seemed best to confine our activities entirely to the northern part of the site.

Of this part of Akhetaten little was known (Pl. xlv). The North Palace can hardly be said to lie in the town, for nowhere near it are buildings grouped with sufficient density to allow us to speak even of a suburb. Its nearest neighbours are large detached villas in their own gardens; these extend up to the northern limit of the bay, where an important but difficult group of buildings was excavated by Professor Whittemore¹. The arrangement of the large court with its surrounding offices suggests a police- and customs-station where persons and goods *en route* towards the city were examined. The city itself is not clearly limited towards the north, but the great Aten Temple divides it into two unequal halves and thus provided us with a well defined starting-point from which we decided to clear systematically northwards.

The Aten Temple.

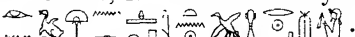
The Aten Temple had to be included in our scheme. Sir Flinders Petrie and Dr. Howard Carter had excavated there in 1896, but their work was admittedly not final. Thus every excavator of Tell el-'Amarnah is under an obligation to complete this work and to attempt to gain a better insight into the main characteristics of a building which in the mind of the founder of Akhetaten must have been its very centre. Our investigations there are not yet finished and are beset throughout with appalling difficulties, for the temple has been so thoroughly destroyed that not even the pavement is left in its place. Moreover large open areas within the enclosure and numerous brick walls suggest that the building never passed beyond a provisional stage of completion and that much of what the representations would lead us to expect was either never executed at all or in a temporary manner only. This discrepancy between the preconceived plan of Akhetaten and its actual execution was already surmised by Mr. N. de Garis Davies and our work bears out his perspicacious interpretations of the tomb-pictures² in yet

¹ *Journal*, XII, 10 sqq.

² N. DE GARIS DAVIES, *The Rock Tombs of el Amarna*, II, 20 sqq. and V, 20; also SCHAEFER in *Sitzungsberichte Akad. Berlin*, 1919, 478².

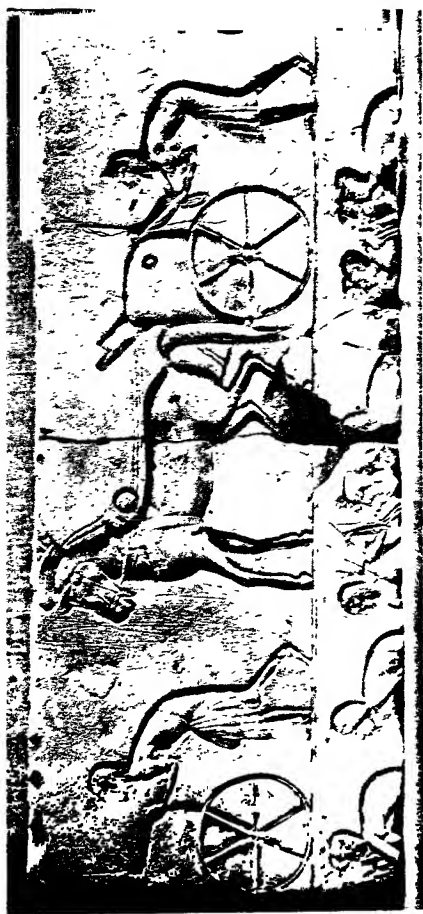
another point: the Aten sanctuary differed entirely from the traditional type of Egyptian temple in that it did not contain within its temenos-wall one coherent structure with its annexes, but a number of congeries of buildings with much open space between. Thus the sanctuary as a whole seems to have had rather the character of an open air temple, and its plan may well have been a greater break with tradition, a more fundamental innovation, than one realizes.

While at present we must refrain from more definite remarks on the architecture of this important building we may mention here the objects found in its ruins as an immediate reward of our labour. In the first place there are a number of sculptured blocks of limestone too fragmentary to indicate anything more than the excellent quality of the workmanship. They show parts of the bodies of the king and queen, boldly modelled, strongly coloured and finished in great detail: their ornaments still showed traces of having once been covered with gold foil. A number of smaller fragments of sandstone are of rougher workmanship, though this did not show originally, as they were covered with a fine white plaster to which the finishing touches were no doubt applied. The finest block of all, of limestone, is shown here (Pl. xlv. fig. 1). It belongs to the best relief-work known from 'Amarnah. Charioteers, soldiers and priests "stand at attention" in the true oriental way which apparently does not interfere with the activity of musicians, who continue to produce with flute and lute the tune required by the occasion. To the left was shown no doubt Akhenaten in some ceremonial act.

The destroyers of the temple have often gone down to below floor level, and so we struck a deposit which otherwise might well have remained hidden. We found huddled together six bronze vessels (Pl. xlvi) inscribed with the cartouches of Akhenaten, Nefertiti and the Aten, the latter once in the old and once in the late form. The finest vase, with the later form of the Aten name, is "Dedicated by the standard-bearer of the legion Sehetep-Aten, Ramose," .

The vases are obviously not all of the same date, and as some were not perfect it may be that they were buried when they were replaced by others, for there is evidence elsewhere, for instance in the Egyptian temple at Byblos, which seems to point to the fact that objects once consecrated for ritual use in the temple were never removed from there, but were buried within the temple precincts when they were no longer thought worth keeping among the treasure.

On the other hand it is just possible that the vases were hidden when the temple was left, for the remains of a doorway which had been bricked up proves that the temple stood closed for some time before it was actually destroyed. This fact shows even more strongly than the similar closing of the better private houses that there must have been in the beginning of the Restoration a short period of uncertainty during which it was not yet realized that the return to Thebes implied the irrevocable end of the Akhetaten episode. One feels inclined to ascribe this period of uncertainty, during which the temple stood empty but intact, to the reign of Tutankhamūn, for we found again traces of the succeeding reign in the sanctuary, in the shape of fragments of a limestone sphinx inscribed on its base with the cartouches of Horemheb. Interference from that quarter at Tell el-'Amarnah could hardly have been other than destructive. Even if we are not able to decide whether the sphinx signifies that Horemheb erected some construction to honour an Aten now reduced to its former insignificance, or whether he established in the very centre of the heresy a small monument to Amen-Rē, it seems most probable that the thorough devastation of the great temple was his work, and it may yet appear that in his pylon at Karnak were incorporated blocks not only from



1. Limestone block from the Aten temple. *Scale c. 1.*
 2, 3. Limestone blocks from a shrine found in the official residence of Panchsy. *Scale c. 1 and 1 respectively.*

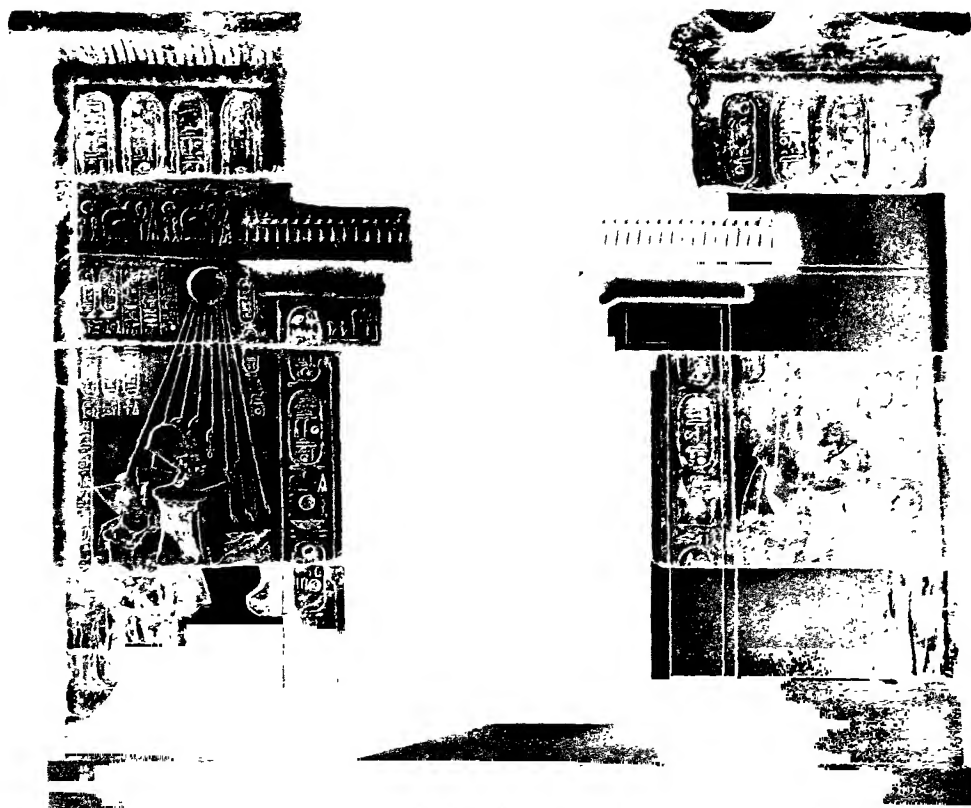


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Sacred vessels of bronze from the Aten temple
S. 10. 1.



1. Restoration of the central room of Paneḥsy's official residence, showing the shrine.
2. The shrine, partly restored.

Akhenaten's temple at Thebes but also from Tell el-'Amarnah. The abnormally small quantity of stone found on the site of the great temple would be best explained if it had been used as a quarry on a large scale and not merely locally, and the period to which such organized and wholesale quarrying may most reasonably be attributed is obviously that at which took place the destruction of the sanctuary so amply testified by the condition of the remains.

Panehsy's Official Residence.

Immediately south of the temenos-wall of the temple there rose an isolated hillock, of promising height and obviously not disturbed in recent centuries. The complex of buildings it contained is shown in plan in Fig. 1 and their situation on Plate xlv, T 41. It puzzled us somewhat at the time of its discovery because, though it was well built and luxuriously appointed, the number of private rooms is small and hardly exceeds

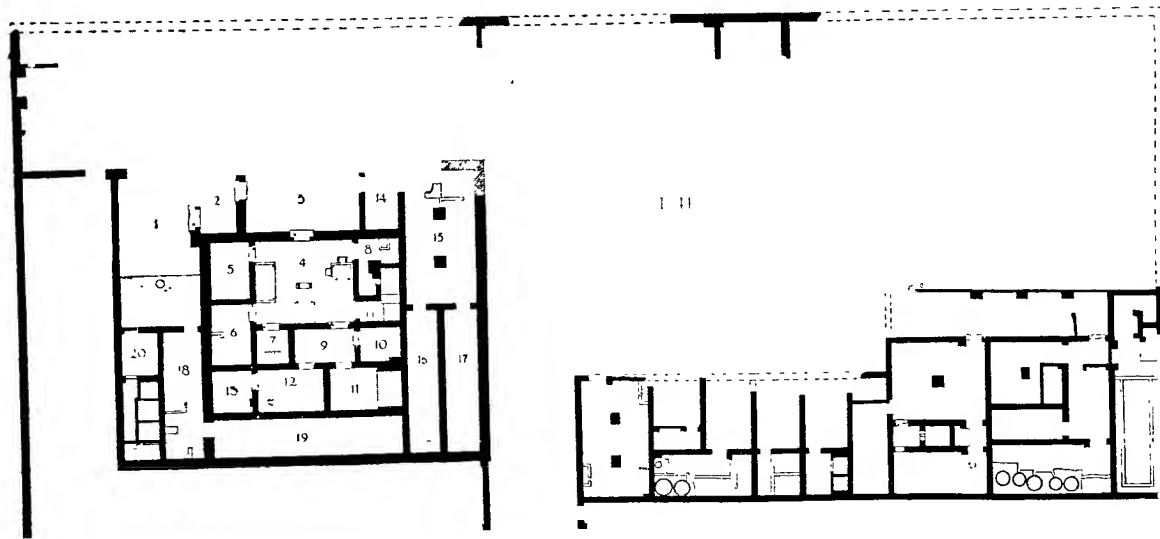


Fig. 1. Scale 1 : 500.

the indispensable north loggia (reception room), central hall (living and dining room), clothes cupboard, bedroom, bathroom and lavatory. Women's quarters there are none, while the unusually extensive magazines are built up against the house on three sides. These exceptional features suggested to us that the house was not an ordinary dwelling-place but the official residence of some high temple official. This hypothesis was supported by the discovery that the bricks of the building were stamped with the royal cartouches, and, in the case of the outbuildings and enclosure walls, with two *ankh*-signs. But our supposition became a certainty when we discovered some fragments of the stone door-jambs giving the names and titles of the occupant: Panehsy, first servitor, and superintendent of the cattle of the Aten. Now we not only know the tomb of this high dignitary, but Professor Griffith also found in the southern part of the town a large estate which was his. There we see all the comfort and elaborate accommodation required by a wealthy Egyptian of the 14th century B.C., and the buildings we discovered this year will only have served on those occasions when special ceremonies and celebrations made Panehsy's continuous presence at the temple imperative.

The grounds were entered at the north-west corner. The large gateway had been bricked up when the place was left; just behind it was the porter's lodge. To the right was a verandah supported by one column. Here, where the scribes would sit and keep account of the movements of goods, one entered the magazines which surrounded the house. Those on the west seem to have been subjected to secondary alterations. In the southern one we found a large number of flints, in that on the east a mass of rough garnet and some rough carnelian. Remains of cattle, horns and bones, cropped up everywhere, and it thus seems probable that these rooms served for the preparation of

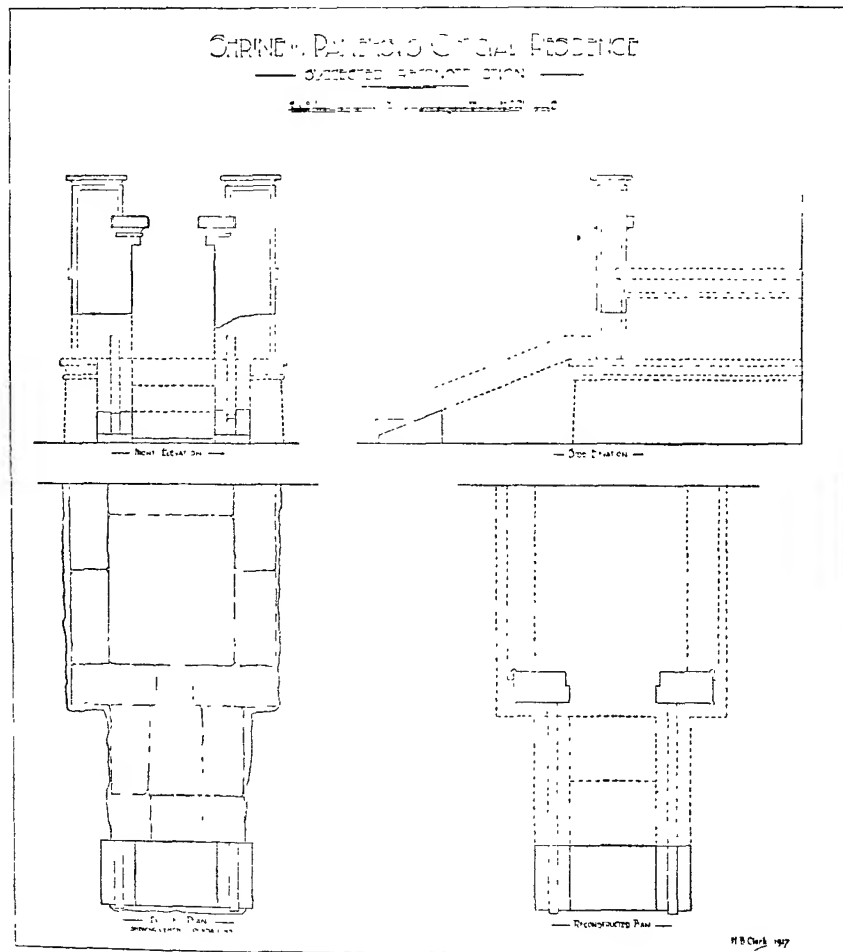


Fig. 2

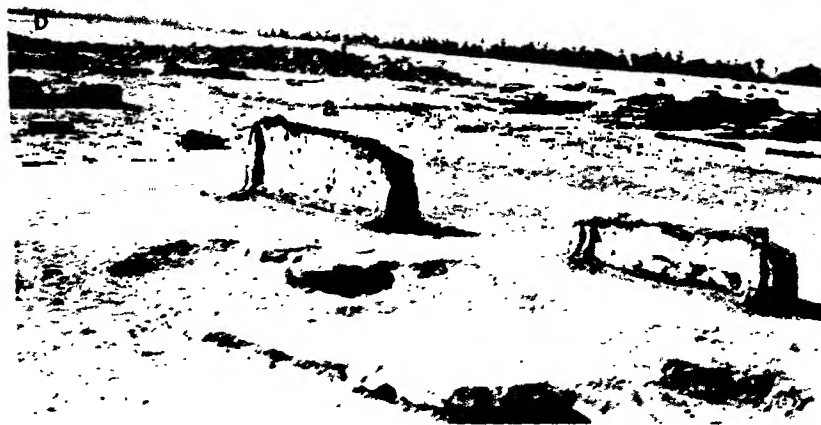
the sacrificial animals, for which Panehsy, as superintendent of the cattle of the Aten, was responsible. This adds importance to a small find made in the east buildings, namely some sherds of a rough red vase in the shape of a bull. The mouth seems to have been used as an outflow, and between the horns there seems to have been a sun-disk with a uraeus. It is highly probable, in view of the place where this vase was found, that it was a ritual vessel, and, while I do not remember an Egyptian parallel, bull-rhyta are extremely common in Asia Minor in this period and later. Without therefore jumping to the conclusion that the ritual at Tell el-'Amarnah contained Asiatic features we may

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Views of the Hall of Foreign Tribute.

1. From N.E.: at *a*, entrance into N.E. block; at *b*, platform with pillar bases for canopy over throne. In foreground, subsidiary building in N.E. corner.
2. From N.E.: in foreground, screen-walls of Royal Robing Chambers. At *a*, central point of building. At *b*, southern platform.
3. From S.W. over lustration slab in N.W. block.

note the importance of our find as a possible link in an argument which later discoveries may either prove or disprove.

The most important finds in Paneḥsy's official residence however were the remains of a sculptured limestone altar in the shape of a small shrine (Fig. 2 and Pls. xlvii, xlv, figs. 2 and 3). In the central room, against the southern wall, and thus facing the entrance, there was a plaster foundation for a square platform of limestone blocks, with a miniature stairway leading up to it. One block with a piece of the sloping railing was still in position and enabled us to reconstruct the whole. Pl. xlvii, fig. 1, shows Mr. Clark's reconstruction (see also Fig. 2). Lying about in the room we found the sculptured stones of the top part, which had been thrown aside, while the ordinary blocks which could be re-used immediately had been carried away by hunters for building materials. Similar altars were already known to us, but they were made of mud-bricks and only carried a stele. Here, however, we have the model in limestone of a small sanctuary; the stones we found represent the entrance, the so-called "interrupted arch." Underneath the inward projections on both sides are grooves for the spills of the double door of wood, and certain roughnesses on their sides prove that two little walls, crowned with a cornice, connected the entrance-arch with the south wall of the room at the back of the platform, and thus formed the sides of the shrine. We do not know whether a statue of Akhenaten stood behind the wooden doors or whether the inside was empty; the latter would be natural if it were intended to picture a sanctuary of the disk, of which no sculpture in the round could be made.

The extant parts show on the two sides of the door scenes which are identical in essentials though pleasingly different in details. Akhenaten, Nefertiti and Meritaten are shown offering to their god, who sends down rays ending in hands both to the offerings of food, flowers, incense and water, and to the royal worshippers. The name of the Aten is given in the later form. The sculpture is a fine example of the style of 'Amarnah though the drawing shows a tendency to accentuate in an exaggerated way physical characteristics of the royal personages, which in its most extreme manifestation produces what seem to us caricatures. The modelling of the *relief en creux*, however, is very delicate; moreover the right half retained most of its colouring, which we at once fixed with celluloid. Even the hieroglyphs were painted, often with more than one colour for the different parts of each sign. The reconstruction of the missing stones as shown in the photograph was done by the Department of Antiquities, which has retained the shrine.

The Hall of Foreign Tribute.

Up against the north side of the temenos of the Aten Temple we noticed a slight elevation which also extended within the enclosure (Pl. xlv, S. 39) and for which we thought that the fallen bricks of the wall could not account. On investigation we found indeed that it contained architectural remains. They were of the scantiest possible nature, fragments of walls and pavements, standing at most two or three bricks high, while, strange and paradoxical circumstance, stairs seemed to crop up everywhere. Pls. xlviii and xlix show both the actual state of the building and the plan, which we reconstructed with considerable difficulty but which is in all points based on the remains and may be considered as certain. It has, to my knowledge, no parallel in Egyptian architecture, and its discovery is of the more importance as a representation in a tomb enables us to identify it. If we leave out of account the separate building in the north-east corner and the details inside our building we may say that it consists of four platforms, each

accessible by three stairways and connected by two roads which cross at right angles. The four platforms differ from each other in their secondary features. Those in the east-west axis are bare; the northern one possessed two, or perhaps four columns, of which two bases survive *in situ* and one more near by. The platform opposite was the only one in which a door-sill was found and which therefore was closed by a door in the middle.

Now we find in the tomb of Huya¹ a scene represented which is of extreme importance, as it is one of the few instances where the tomb-pictures give us a glimpse of what happened during Akhenaten's reign besides praying and rewarding the faithful. Here we see the king and queen carried in the state-palanquin from the palace "to receive the tribute of Syria and Nubia, the west and the east; all the countries

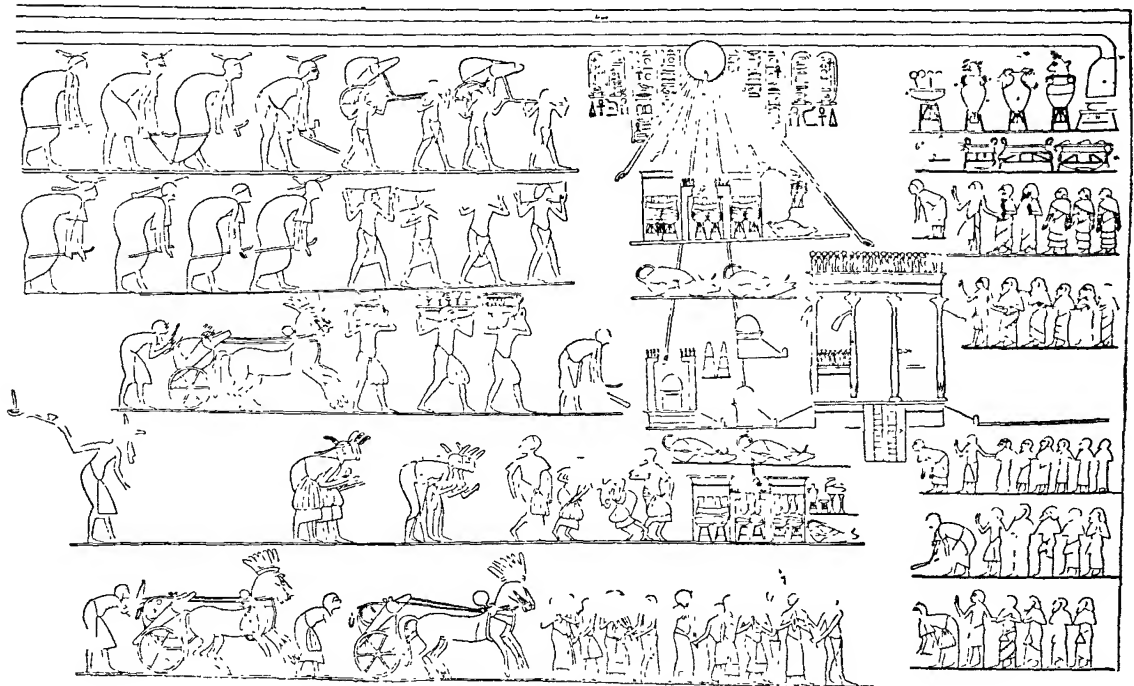
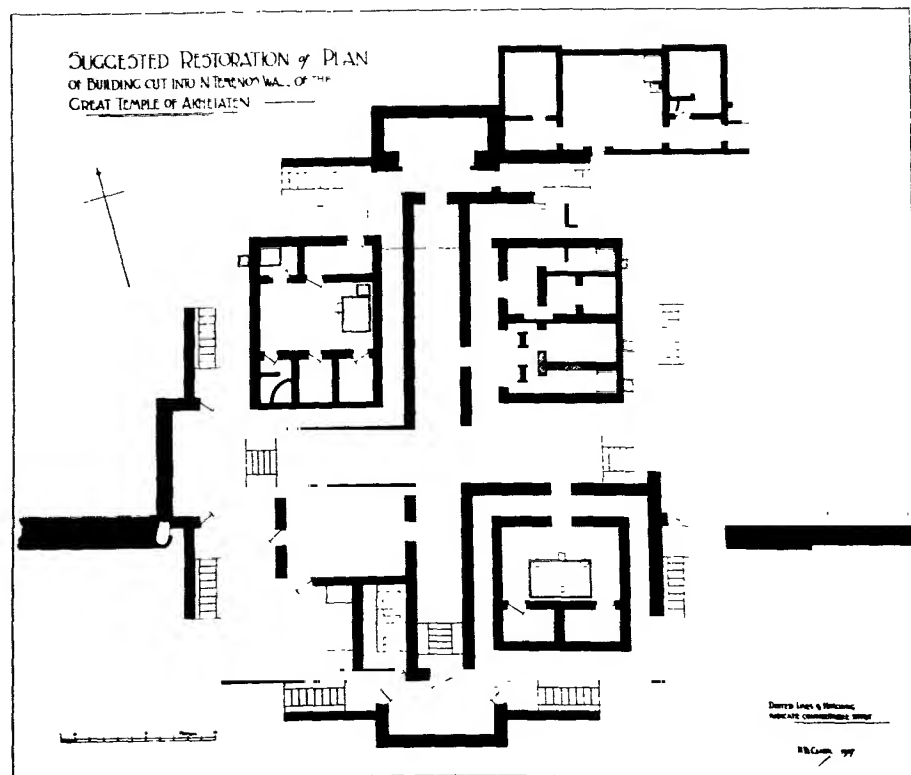
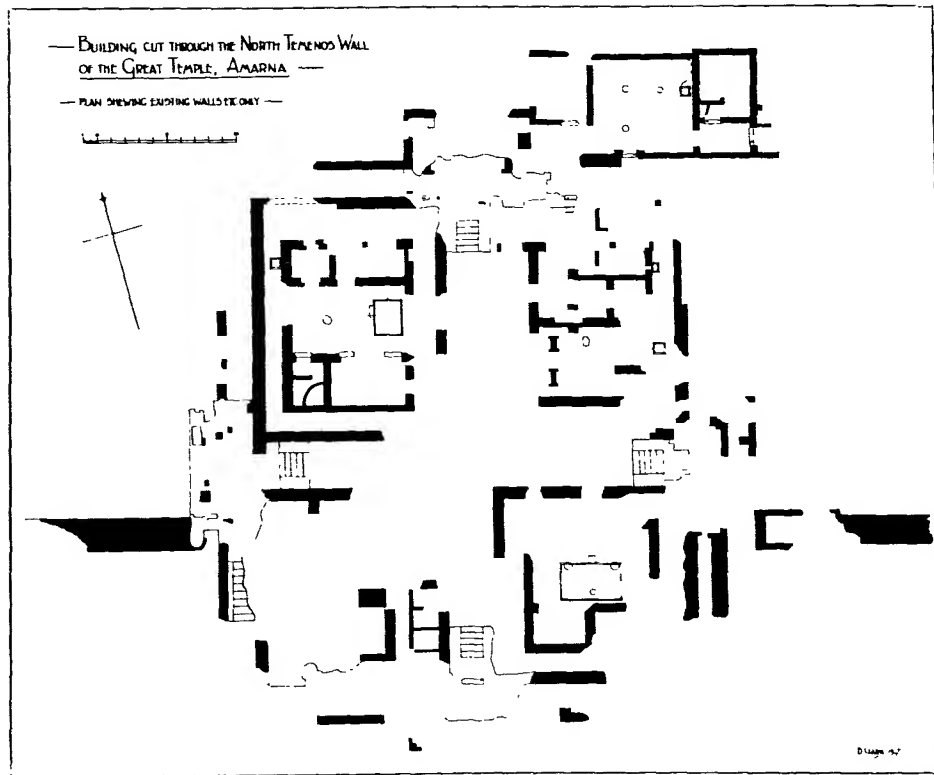


Fig. 3 (after N. de Garis Davies).

collected at one time, and the islands in the midst of the sea, bringing tribute to the king on the Great Throne of Akhetaten for receiving the imposts of every land, granting to them the breath of life." The scene is dated in the twelfth year. The building (Fig. 3) which formed the centre of the ceremony, to which the captives and slaves are conducted and to which the tribute is carried, is rendered in a diagrammatical way and the draughtsman pictures there neither persons nor proceedings. But there can be no doubt to anyone accustomed to the conventions of Egyptian representation that he figured the very building of which we discovered the remains. Thus in his drawing we see four platforms, and they are differentiated in the same way as those of our building: those in the vertical axis are simply platforms with a heap of offerings on the top, and the two platforms which lie in the axis at right-angles with them show, on the right the columns of our

¹ DAVIES, *op. cit.*, III, Pl. xiv.



The Hall of Foreign Tribute.

north platform, and opposite one which has a door in the middle, like our southern one, where alone we found a limestone door-sill. There can be no doubt that the platform with the columns was the "Great Throne of Akhetaten for receiving the imposts of every land." Here the king must have presided over the ceremony, and the actual situation on the site enables us to reconstruct the whole ceremony with a very high degree of probability. If a review was held, or the tribute inspected, this would have been done in the open space north of our building, which is admirably adequate for such a proceeding. We have to imagine Akhenaten and Nefertiti carried in the gold palanquin along the rows of slaves and the heaps of gifts. Then they would enter our building at the north-east corner, either by the separate little dwelling or directly by the stairs to the platform. They would not, however, proceed directly to their thrones under the canopy which was borne by the columns, but enter by a special door which leads with one step from the stairs into the north-east block (Pl. xlviii, 1, at *a*). These are no doubt the robing chambers, for in the palace of Ramesses III at Medinet Habu, and apparently in the palace of Amenophis III at Thebes, we find an exactly similar arrangement: there are at Medinet Habu no fewer than three thrones (one also with columns for the canopy), all three having robing chambers with a lustration slab in their immediate neighbourhood with which they are directly connected. Mr. de Garis Davies has already remarked in discussing the picture in Huya's tomb that the bound sacrificial animals "show that a religious ceremony of some magnitude was contemplated." We know, too, that in such ceremonies lustrations were essential not only for the king, but also for the priests before they could officiate. For their benefit the whole of the south-east block is arranged; it merely contains in front of the two small rooms one big lustration slab, of such size that the columns necessary to carry the roof rest on bases included in it. The north-west block, otherwise meant, as it seems, to provide the priests with a place to which they could retire, contains also two lustration places (Pl. xlviii, fig. 3), and in all these cases the sinks are put in the ambulatory so that servants could empty them without interfering or even being seen; in the case of the royal robing chambers a special angular wall screened the ambulatory from the little door through which the king would enter from the north-east stairs, and through which he also would leave the block to take his place under the canopy. The actual position of our building, half inside and half outside the temenos wall of the Aten Temple, suggests the nature of the ceremony. No doubt Akhenaten here transferred to his god with solemn ritual the tribute he had received from the foreign countries. One imagines that it was brought in piece for piece and, while the king presided, heaped on the western and eastern, and perhaps also on the southern platform. Whether the latter may be included depends on the interpretation of the tomb-picture: it may be that the platform with the door there bears a heap of offerings; it may also be that it is meant to represent a stele. On our arrival villagers offered us a piece of a quartzite stele on which Akhenaten and Nefertiti were shown offering to the Aten, and which they claimed to have dug up near our building; this might conceivably be a fragment of the stele which stood on the southern platform. The south-western block seems to have been a magazine; the tribute may have been deposited there after the ceremony was over, or it may have been removed to the temple storehouse.

It is further important that our building was to all appearances especially constructed for this purpose and therefore the phrase "the Great Throne of Akhetaten for receiving the imposts of every land" may have been its official designation. Where the temenos wall continues to the west of our building there are clear signs that it had been broken through and that it did not originally contain therefore the Hall of Foreign Tribute. To the east of the hall there is a broadening which can best be explained as one half of a

small pylon gate. Apparently when the order came to put the hall on the north temenos wall of the Aten Temple, the architect started where there was already a break in the wall, *i.e.*, a small gateway. From there onward he broke away as much of the wall as was necessary to fit the hall in.

Of the decoration hardly anything was recovered. The outer walls were plastered white and may have had polychrome designs higher up, such as we found in the private houses. Here we found just a few scraps of painted plaster outside. Inside the doors and niches were painted in yellow and white. Remarkable are, in the southern royal robing chamber, two screens of mud plastered white which are an exact replica of bronze clamps with a central rib such as might form the feet of a modern fire-screen (Pl. xlviii, 2).

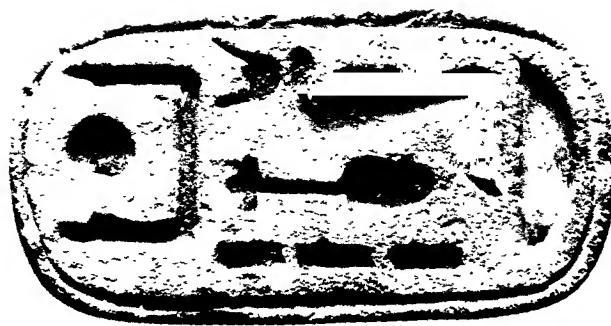
A few questions may close the preliminary discussion of this most important building. It is remarkable that it should be pictured in the tomb of the one high official who was particularly connected with the Queen-Mother Ty. Was it Ty, well versed in imperial matters, who suggested to her son on her arrival in Tell el-'Amarnah that a public demonstration of undiminished power over the dominions was sorely needed to maintain the prestige of the dynasty? Did Akhenaten utilise this practical suggestion of Ty "ad maiorem gloriam" of the Aten, and as a new demonstration of the universalism of that god? And, most important question of all, what were the conditions in Asia at the moment the demonstration took place; does the ceremony represent a temporary success obtained by a rally of the Egyptian forces, or was it merely a sham, a weak attempt to save the position in Egypt and intimidate the opposition by a display of power which had no longer any basis in reality?

The Northern Part of the Town.

The ground immediately north of the temple seems not to have been inhabited. It slopes down rather steeply in a wâdî, and on the northern edge of this, due east of the village of Et-Till, lies the part of the town which we began this year to excavate (Pl. xlv). We cleared a narrow strip of houses from east to west, thus obtaining the extent of the habitation and a clear basis from which in a future season we shall continue to work northwards. As always, the discovery of a number of houses revealed many interesting details. On the whole the houses are less sumptuous than those known in the southern part of the town. The plan of the district now under excavation is similar to that from the south in that two large roads run through it from north to south. On these the best houses, often with a garden in front, are situated. Between are very closely packed middle-class houses and huts, corn bins and bazaar-like courts, all connected by a fascinating maze of crooked alleys. A full discussion of all these matters will be better in place when we have completed the excavation of this part of the site and can treat it as a whole. It may be said here, however, that we obtained this year more material than was found in any former campaign on this site for the reconstruction of the domestic decoration. Numerous fragments of painted plaster were recovered and carefully treated with celluloid, so that they could be handled and the designs reconstructed. This painstaking work was done by Mr. Glanville, and our newly gained insight into the appearance of the reception- and living-rooms of the period will appear in the reconstructions to be embodied in the second volume of *The City of Akhenaten*, which will be a comprehensive memoir on the northern part of the town. Some of the decorative designs, however, large garlands of petals and flowers combined with bunches of hanging ducks, are of such artistic value that they will be published in full colours in the Newton Memorial Volume, *Mural Paintings of Tell el-'Amarnah*, which the Society is hoping to issue in the course of next year.



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Miscellaneous finds.

- 1, 3. Limestone stamp for sealing wine-jars. *Scale c. $\frac{1}{2}$.*
2. Bronze figure of Sebek, the crocodile-god. *Scale c. $\frac{1}{2}$.*
4. Baby's rattle of pottery. *Scale c. $\frac{1}{2}$.*
5. Clay figure of Taurt. *Scale c. $\frac{1}{2}$.*



1



2



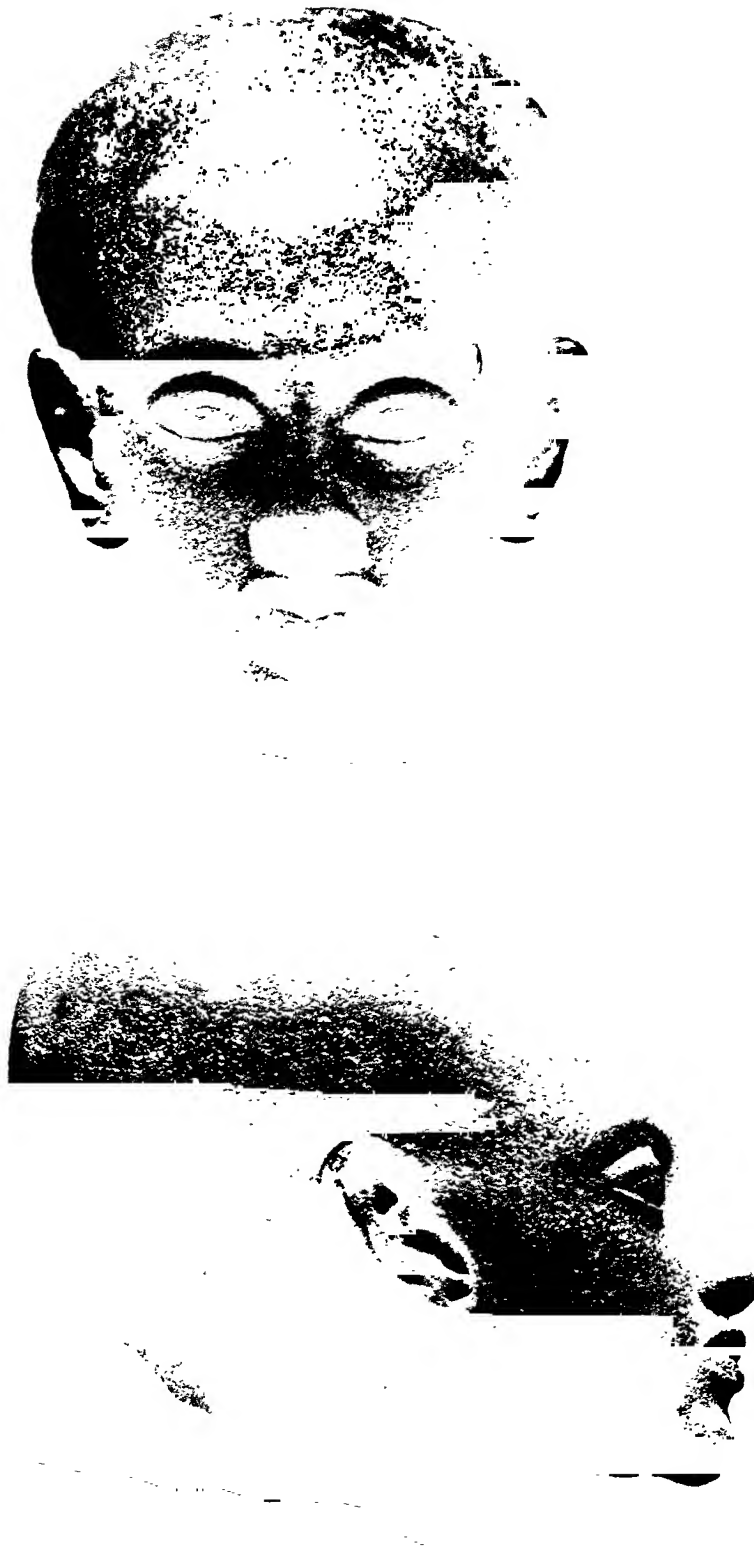
3

1, 2. Fragments of fayence tiles. *Scale c. 2.*

3. Fragment of painting on mud background ; from the North Palace. *Scale c. 1.*



Portrait head in red quartzite of one of Akhenaten's daughters.



Portrait head of one of Akhenaten's daughters.

Scale c. 1.

We may just mention a few of the objects found in the houses. Considered in their entirety they give us hope that the continuation of our work here may provide us with the badly wanted material to link up the 'Amarnah period with what immediately followed, for it seems that this part of Akhetaten was inhabited in the latest period of the town's existence. We found a number of ring-bezels with the name of Smenkhkherē and some of Tutankhamūn, one actually with the name in this form.

The small finds allow us again a further insight into the life of Akhenaten's subjects. Most important seems to me the discovery in one house of two representations of the crocodile-god Sebek, one broken, of fayence, but clearly showing an opening in the head to take the feathers, and the other of bronze, possibly a stamp (Pl. I, fig. 2). We know that certain minor gods like Hathor, Bes, Taurt and Uazit were not proscribed, or at least tolerated. Perhaps they were merely considered as friendly genii, the existence of which might be admitted without infringing on the prerogatives of the Aten. Perhaps also they were so familiar to the people that it was impossible to proscribe them without risking a popular rising which the annihilation of the official pantheon had not brought about. We found again this year not only glazed amulets but also clay statuettes of those deities (Pl. I, fig. 5). But with Sebek the case is entirely different. He is one of the great official gods and certainly there was as little room for him in Atenist theology as for Isis, Nephthys, Selket and Neit¹. Here then we have for the first time proof of what one liked to surmise already, namely that not all the inhabitants of Akhetaten adhered with conviction to the new faith, though few had apparently the courage to risk their safety and success by continuing to worship their old gods, as the inhabitant of house U. 36. 12 apparently did.

Of the other small objects little need be said here. There are some particularly fine fragments of polychrome fayence tiles, not only of the well-known lotus pattern, but much more elaborate, showing, *e.g.*, a young bull amongst rushes (Pl. li, figs. 1, 2). There are the objects of daily use, such as a pair of razors, obviously lost on the staircase of a house, wrapped up in linen. Unique was a baby's rattle of pottery ornamented with a gazelle's head (Pl. I, fig. 4), and a remarkably well preserved limestone stamp for sealing wine jars (Pl. I, figs. 1, 3).

Quite by itself stands the most beautiful object we found (Pls. lii, liii). It is a small portrait head of one of the daughters of Akhenaten, in red quartzite, modelled with great sensitiveness: see the smooth forehead and the exquisite curving-in of the temples, the fine cheeks, the large sad eyes under the heavy lids and the painful grooves on each side of the mouth which one is surprised to find in so young a face and which bring home to us the pathetic humanity of those frail children with whom the dynasty came to an end. A little projection where the head has been broken off shows that it formed part of a group; probably the little princess stood in front of a throne on which her parents were seated. It remains uncertain where this group was originally placed. The head was found in the grounds of House U. 37. 1, which had a comparatively large garden on the East Road, one of the two main thoroughfares, and in that garden we found the foundations of two kiosks, which may have been chapels, while up against the wall of the house there was a remarkable terrace. Here such a group might well have stood. But on the other hand there were no chips of quartzite lying about, and as we know that this material was frequently used in the official stelae and statues in the temple, the little head may have been picked up almost anywhere after the monuments

¹ Schäfer has shown that these goddesses, which were usually pictured at the four corners of the royal sarcophagi with wings outstretched in protection of the dead, were displaced at Tell el-'Amarnah by royal women, *e.g.* the queen on the sarcophagus of her daughter Meketaten. (*Zeitschr. f. äg. Spr.*, LV, 3 ff.)

had been destroyed by the reactionaries, to be eventually thrown down where we found it. It is cleanly broken off and quite perfect.

The Paintings from the North Palace.

The discovery by Mr. Newton in the North Palace of paintings which are the only examples of purely secular art which we possess from Egypt and which at the same time are of the highest artistic value, put our Society under a very great responsibility, for once discovered they had to be preserved, and their condition was such that preservation under any circumstances seemed almost hopeless. The paint had been put on the mud plaster without any interposed layer. But the chopped straw in the plaster had attracted the white ants, who had tunnelled through substituting dust for straw as they went. The loosely adhering film of paint had moreover lost what firmness it possessed in itself because the occasional rains had cracked its surface all over. Before we roofed the room last year with wood the high winds of February and March constantly brought down little fragments.

The easiest thing was to leave the paintings in the room under cover, even though that cover had of necessity to be light, as one could not expose the paintings to the shocks and vibrations which the erection of a permanent building would involve. But then wood is valuable; the villagers have no scruples, and the police supervision of the site, which is directed from the other bank of the Nile and moreover pertains to two different *mûdirîyas*, is highly inefficient. The stealing of the wood would certainly bring about the destruction of the paintings, even if these were not wilfully broken up as were the pavement discovered by Sir Flinders Petrie and the sculptures of the rock-tombs. Everybody agreed, in fact, that the paintings were doomed if they were left where they were. We therefore decided to attempt their removal. Mr. A. Lucas came and stayed with us for a few days to experiment with various materials, and the method then accepted was further improved in the actual work, which was carried out by Mrs. Frankfort.

First the paintings were cleaned with alcohol and next sprayed with a solution of celluloid in amyl acetate; it was found that this was the only material which strengthened the fabric without spoiling the colours. When this had been done four or five times the film of paint was strong enough to stand some handling and at the same time it was waterproofed. Fine, soft cotton material was then pasted on the face of the paintings, and when it was certain that all the fragments adhered, padded boards were brought up against it, and the material was nailed over the top. The boards were then supported, and the wall at the back of the paintings could with great care be broken away. It was next necessary to remove as much mud as was possible from the back of the paint as it had no coherence and would crumble away in transport and thus leave the paint-film without support. Then the back of the paint was waterproofed and strengthened with celluloid, and all the holes were carefully filled in with a mixture of mud and chopped straw which we made as similar as possible to the original substance. Thus we could pour plaster of Paris on the back, without the risk of its running through on to the face. After this the paintings could travel safely to Cairo and London. The Society is now preparing a special volume devoted to *The Mural Paintings of Tell el-'Amarnah*. It will be dedicated to the memory of the late Mr. Francis G. Newton. The text will deal comprehensively with this remarkable art, and the coloured reproductions of Mrs. de Garis Davies' facsimiles, together with the other drawings and plates, will make the book a lasting record of these admirable works.

Pl. li, fig. 3, is from the original of one of these paintings, while Pl. liv is a photograph of one of Mrs. Davies' facsimiles.



Photograph of a facsimile copy by Mrs. N. de G. Davies of a
painting at Akhetaten. *Scale c. 1/2.*

A PARALLEL TO WILCKEN, *Chrest.* 144

BY W. SCHUBART AND H. I. BELL

[In connection with my publication of a papyrus recording the admission of a youth among the ephebi (*Journal*, XII, 245 ff.) Professor Paul M. Meyer informed me that there was an interesting ephebic document at Berlin; and on my writing to Professor Schubart for information about it and suggesting that he might publish it in the *Journal* he kindly agreed to do so. Unforeseen circumstances having prevented him from doing more than copy the papyrus, he was good enough to send me his transcript and critical notes (here translated into English) with a request to me to undertake the necessary editorial work. The time at my disposal does not permit of any elaborate commentary; I have contented myself with translating the document into English and writing some brief notes and a few lines of introduction. H.I.B.]

The value of the document published below lies in the fact that it is a very close parallel to W. *Chrest.* 144 (=P. Oxy. 477) and therefore helps to fill up the lacunae which left the concluding formulae doubtful. There is one important difference between the two documents, since whereas P. Berol. 13896 is addressed to the exegetes alone, W. *Chrest.* 144 is addressed, like P. Tebt. II, 317, to the exegetes and τοῖς Καίσαρείοις καὶ τοῖς ἄλλοις πρυτάνεσι (see Wilcken's note *ad loc.*); but otherwise the agreement is exact. Both documents are Alexandrine. The difference just mentioned finds analogies in census returns, which are sometimes to one or two, sometimes to several officials. P. Berol. 13896 at last gives us the complete formula for this class of document, and at the same time provides further proof (if proof were needed) of the perspicacity of Wilcken, who had correctly divined the true reading in l. 17 and the sense, though not the actual wording, in ll. 19-20 of the Oxyrhynchus document.

P. Berol. 13896. A.D. 186.

Α[.]...φ Λογγινίφ Λογγίνω
 τ[φ κα]ῖ Ἀπολλωνίφ ἱερεῖ ἐξηγη-
 τῇ [κ]αὶ πρὸς τῇ ἐπιμελίᾳ τῶν
 χρ[η]ματιστῶν καὶ τῶν ἄλλων κρι-
 5 τη[ρί]ων
 παρὰ Ἰσιδώρας τῆς Ἀπολλω-
 νίου ἀστῆς μετὰ κυρίου τοῦ
 ἐπισυμβιώσαντος αὐτῇ ἀν-
 δ[ρ]ος Ἀγαθοῦ Δαίμονος τοῦ
 10 Ἀ[μ]ωνίου τοῦ Θεοξένου Σω-
 σι[κ]ροσμίου τοῦ καὶ Ἀλθαιέ-
 ω[ς] τῶν τὸ ὀκτωκεδέκα-
 τον ἔτος θεοῦ Αἰλίου Ἀντωνίου
 ἐφηβευκότων. Βουλομένη

1. Large initial letter like Α, but Μ is also possible. Too little space for Αἰρηλίφ. Μάρκφ is also unsuitable. 8 begin.: I can conjecture only ἐπ; but do not understand it (a reference to a *sewed* marriage?).

- 15 ἰσκριῖναι ἰς τοὺς τὸ ἰσιὸν ἔ-
 βδ[ο]μον καὶ εἰκοστὸν ἔτος
 [Αὐτο]κράτορος Καίσαρος Μάρκου(ν)
 [Αὐρη]λίου(ν) Κομμόδου Ἀντων(ίνου)
 Ε[ὐσεβοῦς Ε]ὐτυχοῦς Σεβαστοῦ
 20 Ἀ[ρμενιακ]οῦ Μηδικοῦ Παρθ(ικοῦ)
 [Σαρματικοῦ Γε]ρμανικοῦ Μεγ(ίστου)
 Β[ρετανικοῦ] ὑ ἐφήβους τὸν
 γε[γο]ν[ό]τα μοι ἐκ Θέωνος
 τ[οῦ] Θέωνος τοῦ Θέωνος
 25 Σ[ωσι]κοσμίου τοῦ καὶ Ἀλθαιέ-
 ω[ς τ]ῶν τὸ τρισκεδέκατον
 ἔ[τος] θεοῦ Αἰλίου Ἀντωνίνου
 εἰ[φη]βευκότων ὃς μετήλ-
 λ[α]χεν υἱὸν Δίδυμον ἀξι-
 30 ὦ σ[υντάξαι] γράψαι τοῖς πρὸ(ς)
 τούτοις οὖσι [λ]αβοῦσί μου χι-
 ρογ[ρ]αφίαν περὶ τοῦ ἀληθῆ
 εἰν[α] τὰ προκείμενα ὑπὲρ
 οἷς [κ]αθήκει χρηματίζιν
 35 μοι τελιούση τὰ πρὸς τὴν
 ἴσκρισιν καὶ ἐφηβίαν τοῦ προ-
 γεγραμμένου μου υἱοῦ Διδύ-
 μου γράμματα ἔπιτα τῷ
 τε κ[ο]σμητῇ καὶ τῷ γυμνασ[ι]-
 40 ἀρχῷ τοῖς οὖσι προσδέξα-
 σθαι αὐτ[ὸ]ν ἰς τοὺς ἐφή-
 βους, ἵν' ὦ[] vacut.

30. Obliterated; one can only recognize with certainty the infinitive ending before τοῖς.

33 end: εἰπεῖν is no doubt meant, though γράψαι would be more suitable.

38. εἰπα is not certain; α especially is questionable.

42 end: a comparison with W. Chr. 144, where the same formula is clearly to be supplied, suggests [π(εφιλανθρωπημένη)].

The lower lines, from about 33 onwards, are appreciably worse written, but I believe they are by the same hand as the rest.

“To A— Longinius Longinus also called Apollonius, priest, exegetes and superintendent of the chrematistae and the other courts, from Isidora daughter of Apollonius, citizen, with her guardian, her second (?) husband, Agathodaemon son of Ammonius son of Theoxenus of the Sosicrsmian tribe and Althaeian deme, ephebus in the eighteenth year of Divus Aelius Antoninus. Wishing to enrol among the ephebi of the coming twenty-seventh year of Emperor Caesar Marcus Aurelius Commodus Antoninus Pius Felix Augustus Armeniacus Medicus Parthicus Sarmaticus Germanicus Maximus Britannicus the son born to me of the late Theon son of Theon son of Theon, of the Sosicrsmian tribe and Althaeian deme, ephebus in the thirteenth year of Divus Aelius Antoninus, namely Didymus, I request you to order a letter to be written to the officials concerned instructing them to take from me an oath testifying to the truth of the foregoing state-

ments and to tell the proper officials to deal with my case on completion by me of the document for the enrolment and ephebate of my aforewritten son Didymus, and then to tell the cosmetes and gymnasiarch in office to receive him among the ephebi, in order that I may (obtain my desire)."

1. Apparently unknown.

3. l. *ἐπιμελεία*. This title is normally that of the archidicastes (see e.g. JOUGUET, *Vie municipale*, 168, OERTEL, *Die Liturgie*, 354 ff.), and perhaps *χρηματιστῆ* has been accidentally omitted here; or Longinus may, like the exegetes in P. Oxy. 1472, have been *διέπων τὰ κατὰ τὴν ἀρχιδικαστίαν*.

8. *ἐπισυμβιώσαντος*: in the translation I have adopted Schubart's suggestion that the *ἐπι*- refers to a second marriage; the son concerned was by Theon (l. 23), not by Agathodaemon.

12. l. *ὀκτωκαιδέκατον*.

15. l. *εἰσκρίναι εἰς, εἰσιόν*.

26. l. *τρεισκαιδέκατον*.

30. In W. *Chrest.* 144, ἀξι[ῶ] ὑμᾶς *συντάξαι*. Is there room here for σ[ε *συντάξαι*]?²

31. l. *χειρογραφίαν*.

33. l. *προκείμενα, εἰπεῖν* (see critical note). The word is almost lost in W. *Chrest.* 144, 18, where γράψα] is the accepted reading. Should it be *εἰπεῖν*? In P. Tebt. 317, 30 *εἰπεῖν* is certainly to be read.

34. l. *χρηματίζειν*.

35. l. *τελειούση*. In W. *Chrest.* 144, 19 *τελειω]ίνυτι* is to be read. Wilcken had divined the correct sense, though not the actual wording.

36. l. *εἴσκρισιν, ἐφηβείαν*. In W. *Chrest.* 144, 20 read τῇ[ν *εἴσκρισιν καὶ ἐφηβ]είαν*.

38. l. *ἔπειτα*. In W. *Chrest.* 144, 22 read [μῶνος γράμματα *ἔπειτα*].

40f. In W. *Chrest.* 144, 24 read [οὔσι προσδέξασθαι αὐτό]ν (or αὐτὸν προσδέξασθ[αί?]) *ἰς τοὺς [ἐφήβους ἵν' ὧ πεφιλανθρ]ωπ(ημένη)?* (This suits the space marked better than ἵν' ὧ π(εφ.).)

41. l. *εἰς*.

AN HUMPED BULL OF IVORY

BY G. D. HORNBLOWER

With Pl. lv, Fig. 2

The vigorous little ivory bull, just over three inches long, shown in Pl. lv, fig. 2, was apparently a knife-handle; it may be compared with an ivory handle in the Louvre Museum shaped as a calf lying down, neither labelled nor numbered. It was bought from a Cairo dealer in 1925 and there is no record of its origin, but its characteristics are clearly of the Eighteenth Dynasty. The ears are represented in the typical Egyptian manner with lines incised in the interior of the lobes, probably to represent the protective hairs. The attitude is charging, the hind legs stretched straight back, tail afloat. It recalls, of course, the Minoan presentment of animals, especially of bulls, and belongs to the class of objects of the Eighteenth and Nineteenth Dynasties which appear to show Cretan influence in the treatment of swift movement.

A striking feature of this bull is the hump which dates the object almost certainly to the Eighteenth Dynasty, for in monuments earlier than that all cattle are shown as level-backed; they sometimes have high crests, like those of Spanish fighting-bulls¹, but this is a different thing from a hump, being due to the development of the spinous processes of the neck-vertebrae while the true hump, probably developed under domestication, is a mass of fatty tissue serving, like the camel's hump, as a nutritive reservoir in case of need².

Of African cattle the Ankoli or Uganda breed is considered to be the origin of the ancient Egyptian race³; they are level-backed, while the Blue Nile ox has the true hump, like that of many Indian breeds; it is possible that the hump was developed, or introduced, in a comparatively late period.

The origin of the humped breed shown in our ivory must be sought outside Africa and will be found in Western Asia. In several Theban tomb-paintings of the Eighteenth Dynasty Asiatics are represented as bringing tribute of humped cattle. In the tomb of Amenmōse (No. 19), *temp.* Tuthmosis III⁴, two miniature humped beasts appear; their size as depicted need not be taken as real, for it sometimes suited the painter to draw

¹ For examples in the Old Kingdom see *Ptah-hotep*, II, Pl. viii; in the Middle Kingdom the ox led by the thin Beja herdsman (*Meir*, I, Pl. xi) has a good crest like several in *Bersheh* (I, Pl. xviii) and *Beni Hasan* (II, Pls. xv and xxxi-ii). The New Empire remains give us, as might be expected, more numerous examples, of which I will indicate but one, in *Five Theban Tombs*, Pl. xxi.

² See S. G. SHATTOCK, *Proceedings of the Royal Society of Medicine*, II, *Pathological Section*, 227-231. The article contained in these pages, "Normal Tumour-like Formation of Fat," is a classic on the subject and is specially interesting to students of antiquity for its treatment of steatopygy, a subject on which many inaccuracies are current.

³ BRITISH MUSEUM (Natural History), *Guide to Domesticated Animals*, 11, and, for humped cattle, Figs. 2 and 5.

⁴ WRZESINSKI, *Atlas*, I, Pl. 168.



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1. Head of a god, from a stela of Ur-nammu found at Ur.
2. Galloping humped bull, in ivory. *Scale 1/2*.
3. Fragment of a tusk, predynastic, with tip carved as a hippopotamus. *Scale 1/2*.
- 4, 5. Hippopotamus in marble, predynastic. *Scale 1/2*.

animals small, as may be seen in pictures in the Middle Kingdom tombs¹. In tomb No. 19 of 'Abd el-Kurnah, of the first half of the Eighteenth Dynasty, in the cross-room², the hump is not so high; it is still less so in the tomb of Senemioh, No. 127 of Sheikh 'Abd el-Kurnah³, but is clearly marked; possibly a hybrid is represented between the humped and level-backed breeds. An excellent example was on the wall of a Theban tomb now destroyed⁴, the humps are as imposing as on the finest Indian specimens (see Fig. 1). No humped cattle are displayed in what remains of the chamber in Karnak temple where are figured the plants and animals brought from Syria by Tuthmosis III, but one ox is very high-crested⁵. In the Amarnah age some splendid humped cattle from the royal herds are depicted in the tomb of Meryrêr⁶; they might well pass for fine Gujeratis (see Fig. 2). They are in the company of others of the level-backed type and the breed had evidently become, at this time, established in the royal stables. An equally striking specimen is carved on the stela given by the scribe Nebwawi for the tomb of his master Any⁷. This beast seems to have been provided out of the king's stables to grace the funeral of the deceased, a favoured official. Mention may be made of a small carnelian amulet, in my possession, figuring a couchant calf with a hump rising well up over the shoulders but not yet fully developed; the workmanship is that of the Eighteenth Dynasty.

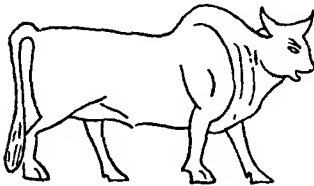


Fig. 1

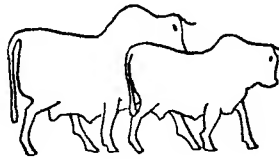


Fig. 2



Fig. 3. Scale 1:1

Turning to Mesopotamian remains, we find the hump exhibited in very early times. In L. King's *Sumer and Akkad*, 69, Fig. 21, is shown a bull with a small but regular hump, from a relief of the best period of Sumerian art. A very early example is a small bull in marble, bored for use as an amulet, which was found at Ur by the Joint Expedition of the British Museum and Pennsylvania University Museum, 1925-6 (U. 6926); it is dated about 3000 B.C. (Fig. 3, from a drawing). A truly remarkable specimen is the bull, no. 116686, in grey-black stone, from Sinkarah, the ancient Larsa, presented by Major Mocatta to the British Museum, where it is now in the Third Babylonian Room, table-case 3⁸. Below it is placed a small humped bull in rock-crystal (No. 1135), seemingly of the same period.

The breed was apparently not a common one; it hardly figures on seals of the great Louvre collection, though a cylinder there, of the 3rd millennium B.C.⁹, gives humps to mountain-sheep, recalling the gypsum rams from Ur¹⁰ which display high crests amounting

¹ E.g. *Beni Hasan*, I, Pl. xxxv.

² WRESZINSKI, *op. cit.*, I, Pl. 340.

³ WRESZINSKI, *op. cit.*, Pl. 345.

⁴ From A. KÖSTER, *Schiffahrt u. Handelsverkehr des östlichen Mittelmeeres*, Hinrichs, 1924, Pl. ii.

⁵ WRESZINSKI, *op. cit.*, Pl. 8.

⁶ DAVIES, *The Rock Tombs of El Amarnah*, I, Pls. xxv and xxvii.

⁷ DAVIES, *op. cit.*, v, 10 and Pl. xxi.

⁸ See SIDNEY SMITH's article in *The Illustrated London News*, Nov. 13th, 1926, p. 945.

⁹ DELAPORTE, *Musée du Louvre, Catalogue des cylindres, cachets, etc.*, I, Pl. 26, no. 7; but see also, for a difference about dating, SCHÄFER and ANDRAE, *Die Kunst des Alten Orients*, 452, no. 7, and note on p. 633.

¹⁰ C. LEONARD WOOLLEY, *The Antiquaries' Journal*, vi, Pl. liii.

almost to humps; from these we might gather that this feature was highly esteemed. In the Louvre collection is a finely worked seal of the Persian period¹ showing a man ploughing with a pair of oxen which carry humps of the true Indian type. Otto Weber² has published two cylinders engraved with the same subject, one from the Pennsylvania University Museum³, dated to the second half of the 14th century B.C., and the other, No. 497, now in Berlin, about the beginning of that century. That the breed was maintained till well into the Christian era is proved by a seal in the Morgan collection⁴, attributed to the Sassanian period.

The above examples all belong to Mesopotamia, but it is apparent, on perusing Contenau's *La glyptique syro-hittite*, that humped cattle had spread to neighbouring regions: they appear in nos. 128, 157, 161, 173 and 242, taken from various collections.

A much earlier example is the relief depicting cattle with true humps on the fragment of a black asphalt vase dug out from the necropolis of Susa of the archaic period⁵, one more witness to links at a very early period between Mesopotamia and Susa—another is the *kaunakes*⁶.

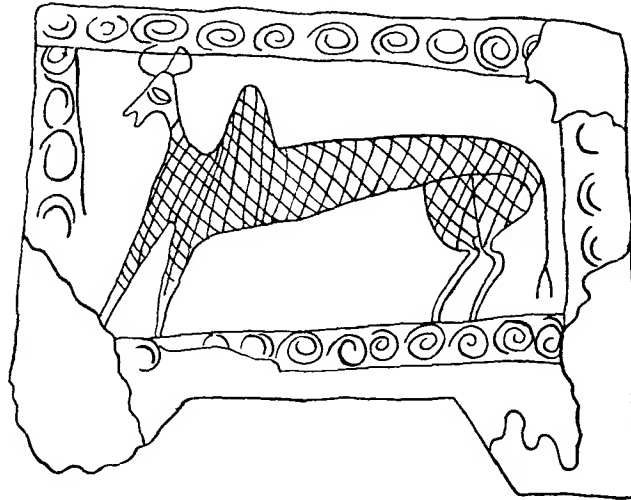


Fig. 4. Scale 1:2

Another region where they seem to have been known is Palestine, where Professor Petrie's expedition, 1926-7, unearthed some small limestone altars on which were scratched, in rough childish fashion, various figures, including one of a humped ox; I am indebted to him for permission to reproduce this in Fig. 4. It is dated to about the 7th century B.C. At the same place were found several small crude figures of animals in baked clay, of which two have large humps and though, like the scratched figure, they are somewhat unrecognizable, they can hardly be anything but oxen.

Finally, thanks to the recent discoveries in city-mounds on the banks of the old Indus, we can take into our purview the cattle of that ancient India whose culture is

¹ DELAPORTE, *op. cit.*, no. 21.

² *Altorientalische Siegelbilder—Der Alte Orient*, years 17 and 18.

³ No. 496, after CLAY; *Publications of the Babylonian Section*, II, 66.

⁴ W. H. WARD, *Cylinders and other ancient Oriental Seals*, no. 312.

⁵ *Mém. de la Délég. en Perse*, XIII, Pl. xxxiv.

⁶ *Mém. de la Délég. en Perse*, XIII, Pl. xl, 7 and 8.

described by Sir John Marshall as "Indo-Sumerian"¹. On one of the seals unearthed is engraved a magnificent humped bull, while the fragment of another² depicts the same hump and horns. Other cattle are represented as level-backed; the humped breed seems, on the evidence so far available, to have held the same place among cattle in general as in Mesopotamia.

In Beluchistan also, at a period supposed by Sir John Marshall to be contemporaneous with the Indo-Sumerian culture, humped cattle existed, as appears from a fragment of painted pottery from Nal³.

In which country the hump originated cannot of course be yet decided. In the case of the red jungle-fowl imported into Mesopotamia and thence into Egypt, as tribute, in the Eighteenth Dynasty⁴, India was the benefactor, through Persia.

In our days there are no humped cattle in Egypt, but cattle experts consider that the present race shows signs of cross-breeding with a humped variety; thus has the tribute of old Pharaohs left its trace till to-day. I have observed that the *fellâh* prefers, for work, a beast with a boss on his shoulders, for he takes the yoke better; perhaps, too, an animal with some of this old strain in his blood is stronger than others. In Mesopotamia, as Mr. Sidney Smith tells me, humped cattle are brought from the Zagros Mts. for purposes of work, the native beasts being too weak and light.

¹ *Archaeological Survey of India; Report for 1923-4*, pp. 47-54: for illustrations see *The Illustrated London News*, Feb. 27th, 1926, p. 346, and A. K. COOMARASWAMY, *History of Indian and Indonesian Art*, 3-4, and Pl. ii.

² *Illustrated London News*, Sep. 20th, 1924, p. 532, and *Arch. Survey of India, Report for 1923-4*, Pl. xix, no. 7.

³ SIR J. MARSHALL in the *Illustrated London News*, March 26th, 1926, pp. 398-400 and Fig. 11.

⁴ HOWARD CARTER, *Journal*, ix, 1-4, *An ostrakon depicting a red jungle-fowl*. To the Mesopotamian seals recorded there as depicting the domestic fowl may be added one in Berlin, published by WEBER, *op. cit.*, no. 493.

FIVE GREEK INSCRIPTIONS FROM NUBIA

BY J. W. CROWFOOT

With Plates lvi and lvii

The Christian inscriptions from Nubia have been discussed at length in a valuable paper which Junker has contributed to the *Zeitschr. f. äg. Spr.*, LX, and the general characteristics of the group are well established. The great majority of the known inscriptions come from Lower Nubia, especially from the excavations of Junker himself, of Griffith and of Firth, and it is probable that most of the certainly Nubian inscriptions of unknown origin in European museums also come from this region: the number which come, like those before us now, from farther south is very small. Of the five inscriptions which follow, four were found in Dongola province and on one an island a little upstream of Wâdi Ḥalfa: three of those from the former province come from villages in the neighbourhood of Old Dongola, the medieval capital of the country, and show a much higher literary standard than the example from Ḥalfa: they may be grouped with the three inscriptions from Old Dongola originally published by Burkitt (*J.T.S.*, iv, 586 ff.).

1. The first of these inscriptions is in the local museum at Merowi, the capital of Dongola province. It is carved on a marble slab measuring 44 centimetres high by 38 wide. The slab has been broken from top to bottom and the top right-hand corner is missing. The stone was found by Mr. G. E. Iles, late Governor of the province, at Nawi, a village some twenty miles down-stream from Old Dongola, and brought by him to Merowi four or five years ago.

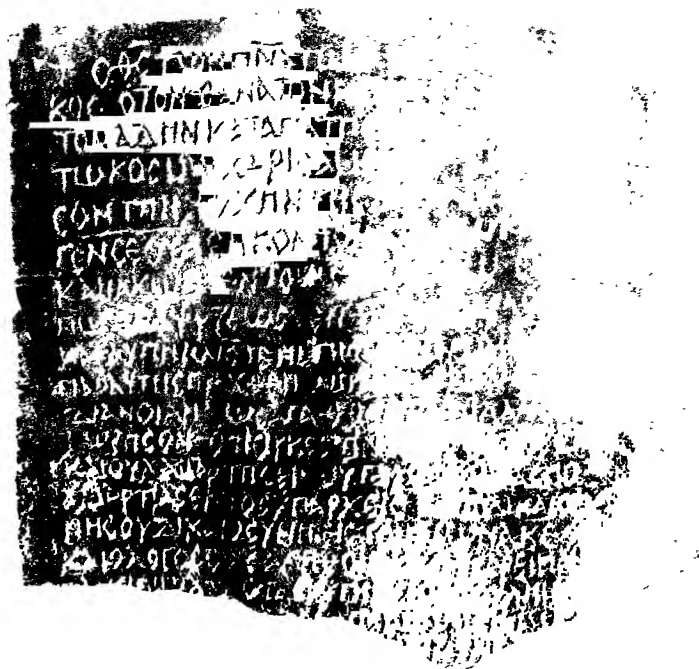
The fracture at the corner leaves a number of letters varying from about eleven to four to be supplied at the ends of the first five lines (see Plate lvi, fig. 2).

Line 1. About eleven letters are missing. The last letters before the break are almost certainly *ις* (on the photograph the *ι* has disappeared in a fold of the paper but two-thirds of the stroke are clear on a squeeze which I owe to the kindness of Mr. A. D. Home, and the form of the bottom half of the next letter forbids us to read it as part of a *κ*) and the inscription will begin with the curious and unparalleled phrase *γέρας καὶ ἀλφῆσις*. The word *ἀλφῆσις* is quoted by Liddell and Scott *s.v.* *ἀλφη* from the Glossaria of H. Stephanus, and the phrase apparently means "Reward and Gain" which might be interpreted as a general Christian sentiment, "Death and Paradise are the wages of life," or with a specific personal reference, "This epitaph is the reward of the deceased." On the analogy of other inscriptions, the lacuna following this exordium may be filled with the words [*κατὰ τ(ῆν) πρόνοι*].

Line 2. The last letter legible is *ο* and it appears to be followed by a *ς*; we may therefore read *ὅς [ἔχει ἐξου]σίαν*.

Line 3. Some word like *ἀπέστη* which occurs in a parallel phrase elsewhere (LEFEBVRE, *Inscriptions grecques-chrétiennes d'Égypte*, no. 634) must be read.

Line 4. The last letter of the line was probably the article qualifying *μακαρίτης* in the next line, and the last letters before the break are *τρι*. We propose to read either *τριβῶν* from *τριβή* or *τριβῶν* from *τριβος*. The same word should be restored, I suggest, in the inscription above quoted from Lefebvre for whose reading *κακῶν* Junker proposes *πονηρῶν*.



1



2

1. Greek inscription from Khalêwa, Soudan. *Scale c. $\frac{1}{4}$.*
2. Greek inscription from Nawi, Soudan. Merowi Museum.
Scale c. $\frac{1}{4}$.

Line 5. $\chi[\omicron\acute{\iota}\alpha\kappa]$ is obvious.

The inscription accordingly may be transcribed and translated as follows:

TRANSCRIPTION.

+ Γέρας κ(αὶ) ἀλφησις [κατὰ τ(ὴν) πρόνοι]
 αν τ(ο)ῦ ἐλεήμονος θε(ο)ῦ ὅ[ς] ἔχει ἐξου]
 σίαν ζωῆς τε κ(αὶ) θανάτ(ο)υ ἀ[πέστη]
 ἀπὸ τ(ῶν) ὧδε πολυστενάκτ(ων) τριβῶ[ν ὁ]
 5 μακαρίτης Γεώργιος ἐν μηνὶ χο[ιακ]
 ἡ ἀπὸ κόσμ(ου) 571^{ME} ἀπὸ δὲ τῆς τ(ο)ῦ χ(ριστο)ῦ
 παρουσίας 572^{HE} ἀπὸ Διοκλητ(ιανοῦ) φ
 573^{HE} ὁ θε(ο)ς ἀναπαύσον τ(ὴν) ψυχὴν
 αὐτ(ο)ῦ ἐν κόλποις Ἀβραὰμ κ(αὶ) Ἰσαὰκ κ(αὶ) Ἰ
 10 ακῶβ ἐν τόπῳ φωτινῶ ἐν τόπῳ
 ἀναψύξεως ἐνθα ἀπέδρα ὁδὺ
 νη κ(αὶ) λύπη κ(αὶ) στεναγμός· πὰν ἀμάρ
 τημα πραχθὲν ἢ λόγῳ ἢ ἔργῳ
 ἢ κατὰ διάνοιαν ἄνευ ἁφες· συγ
 15 χώρησον τὰ παραπτώματα αὐ
 τοῦ ὡς ἀγαθὸς κ(αὶ) φιλάν(θρωπ)ος θε(ο)ς
 πρεσβείαις παντ(ῶν) τ(ῶν) ἀγίων σου +
 τὰ δὲ ἔτη τ(ῆς) ζωῆς αὐτ(ο)ῦ ΠΗ +

TRANSLATION.

Reward and gain.

By the providence of the merciful God, Who hath power over life and death, there departed from these very lamentable tribulations the deceased Georgios on the tenth of Choiak in the year of the World 6345 and from Christ's coming 868 and from Diocletian 574.

O God, give rest to his soul in the bosom of Abraham and Isaac and Jacob, in a place of light, in a place of refreshment, from which pain and grief and lamentation have fled away: every sin committed either in word or deed or thought forgive and remit, pardon his offences as Thou, God, art good and dost love men, by the intercessions of all Thy Saints.

The years of his life were 88.

The inscription falls into four parts: after the opening formula we have the mention of the name of the deceased with the date of his death, then the recommendation of his soul to God, based on the Byzantine Euchology, and, last, the age of the deceased. The inscription presents the following features which Junker (*op. cit.*) has singled out as characteristic of Nubia in distinction from Coptic Egypt: the stone is a plain one without the marginal decoration common on Coptic stones, the age of the deceased is given in the last line and not earlier as in Egypt, there is no calling on the dead, and the wording of the recommendation comes from the Byzantine prayers for the dead. Characteristic Nubian features which do not occur on our stone are the invocation to God, which often precedes the mention of the deceased, and a final doxology. The phrase in lines 2 and 3 "Who hath power over life and death" occurs, as Junker points out *à propos* of an inscription found by Firth, in the Sacramentarium of Serapion of Thumis and is taken originally from the Book of Wisdom, xvi. 13.

Apart from the unique opening formula the only peculiarity which calls for further comment is the use of three eras in lines 6 to 8. There is no other instance, I think, of the use of three eras on a single stone, nor of the use in Nubia of any era except that of Diocletian, and it is unfortunate that we cannot reconcile together the three dates given on our stone. The year 574 from Diocletian corresponds to 858 A.D., which is probably the correct date of Georgios' death, but the Coptic year of Christ 868 is our 876 A.D. and the year of the world 6345 according to the common Alexandrian era of Annianus is our 853 A.D. Either the lapicide, who was in other respects a careful worker, has made two mistakes here, each affecting two letters, or the Nubians adopted dates of their own for the Creation and the coming of Christ. Georgios, the man commemorated, is described simply as "the deceased," he was therefore presumably a layman with no official rank: the name was borne by more than one of the kings of Nubia.

The lettering of the inscription is fair, and the language and spelling are good: the order of the letters in the abbreviation of Diocletian's name is wrong, but the use of $\phi\omega\tau\iota\nu\tilde{\omega}$ for $\phi\omega\tau\epsilon\iota\nu\tilde{\omega}$ and of the same contraction for the accusative and the genitive can hardly be considered mistakes at this time. From this standpoint our inscription compares most favourably with Christian inscriptions of a much earlier period in other places, and shows that in Nubia scholarship had improved vastly since the days of Silco. In Coptic also Nubian scholarship was not contemptible: Steindorff describes a text, from Sai Island, dated probably 985 A.D., as "auffallend gutes, fast fehlerloses Koptisch" (*Zeitschr. f. äg. Spr.*, XLIV, 72).

2. The second inscription was found at a village called Shêkh 'Arab Hag, which lies a few miles north of Old Dongola on the east bank of the Nile. The inscription is cut on a small block of greyish marble, 22 centimetres high by 17 wide: there are three crosses at the top and three at the bottom and 22 lines of inscription, the letters measuring on the average about 5 millimetres in height. It runs as follows¹:

TRANSCRIPTION.

+ + +

ο $\overline{\theta\varsigma}$ των $\overline{\pi\acute{\nu}\alpha\tau\omega\nu}$ ἡ πασης
 καρκος ο τον θανατον καταρ
 γησας ἡ τον αδην καταπατη
 σας ἡ ζωνν τω κοσμω χαρι
 5 καμενος αναπαυσον την ψυ
 χη(ν) την αγγελοκω εν τοπω (sic)
 φωτιω εν τωπω αναψυξεως (sic)
 ενθα απεδρα οδυνη ἡ λυπη ἡ c
 τεναγμος παν αμαρτημα πραχ
 10 θεν η λογω η εργω η κατα διανοι
 αν ως αγαθος ἡ φιλανῶς συγχω (sic)
 ρησουν οτι ουκ εστιν ανῶς ος ζη
 ρεται ἡ ουχ αμαρτησει ευ γαρ ει
 μονος πασης αμαρτιας εκτος
 15 υπαρχεις και η δι ἡ οσυνηξου (sic)
 δικαιοσυνη εις τον αιωνα κε ο λογο(ς) σου (sic)

¹ I have placed dots under letters which are faulty or doubtful.

η αληθεια συ γαρ ει αναπαυσις των σων
 δουλον σου αγγελοςκω κοματι εχων
 ζ σοι την δοξα(ν) ανεμπωμεν τω πρι ζ τω (sic)
 20 υω και τω αγιω πνι νυν ζ αει και εις
 τους αιωνας των αιωνων ιηθ οτιεγ (?)
 οντρι εστιν ετη της ζωης ξθ (?)
 + + +

TRANSLATION.

God of spirits and of all flesh, Who didst bring death to nought and trample down Hades and didst give life to the world, give rest to the soul of Angelosko in a place of light, in a place of refreshment, from which pain and grief and lamentation have fled away: every sin committed either in word or deed or thought forgive us Thou art good and dost love men, because there is no man who shall live and not sin, for Thou art alone, Thou art without sin and Thy justice is eternal justice. Lord, Thy word is the truth, for Thou art the rest of Thine own (servants, Give rest to) Thy servant Angelosko Komatiekhon. And to Thee we sing glory, to Father and Son and Holy Ghost now and for ever and for ages of ages. Amen. ??? The years of his life are 69.

This inscription contains the commonest of all the formulae on these Nubian grave-stones, what Junker calls *das wichtigste Gebet*, complete with invocation and doxology.

There are only two small points which call for comment:

Line 18. I have translated it as if the last ten letters formed a single otherwise unknown Nubian name, and the word *αναπαύσον* is to be supplied from the previous phrase: is it possible, however, that the name was Komati and that the last four letters are the present participle of the verb *εχω*, governing *δουλον*?

Lines 21, 22. I can make no sense of the letters after the numerical symbol for Amen and the first five letters of the last line.

The Greek is tolerably good, though there are slips of grammar or spelling in lines 6, 7, 11, 15, 16, and 19.

3. The third inscription (Plate lvi, fig. 1) was given me about twenty years ago by the 'Omda of Amentogo, who said that it had been found at Khalêwa, a village on the west bank from which several architectural blocks have come. The stone is of greyish marble, broken at the bottom; 16 lines are preserved with portions of three others—the last line of the doxology and a line giving the age of the deceased are all probably that is missing. The greatest width of the stone is about 40 centimetres.

It is unnecessary to transcribe or translate this inscription as it is legible in the photograph and is almost identical with the one preceding, and it will be enough to draw attention to the few points in which it differs.

It is in commemoration of a lady named Genseoua whose name occurs at the beginning of line 6: this name has been previously read Genseousa, but there is no other example of a ligature in the inscription and Genseoua is the most probable reading. In lines 6 and 7 the three patriarchs are mentioned as in the Georgios and so many other stones. In line 14 the phrase runs "For Thou alone art without any sin," not as in the Angelosko inscription, and in no. 5 below and in one published by Griffith. In line 17 the phrase ran "Thou art the rest and the resurrection" followed by the accusative.

The lettering is better than that of Angelosko but less good than that of Georgios: the use of dots between phrases is, I think, a rare feature: in line 10 what looks like an iota subscript has been rather unfortunately supplied after η : the word $\kappa\alpha\iota$ is written throughout uncontracted.

4. This inscription, Fig. 1, is a mere fragment which General Sir Herbert Jackson showed me in a village called Debeiba, about two miles south of Merowi. The stone is of marble and was lying in the village cemetery in a circular enclosure round a grave. I had no measure with me and my copy was made hurriedly while the sun was sinking, so it is only a rough representation, but I question whether I could have improved it much with more time at my disposal. The stone was originally much larger than the other inscriptions and it must once have belonged to a tomb with a different superstructure. Only the ends of the four bottom lines and the ends of three lines cut on the broad border of the stone remain, and this is tantalising because these few letters show that the formulae

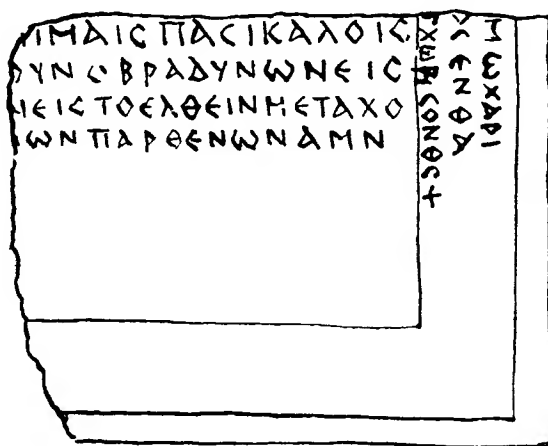
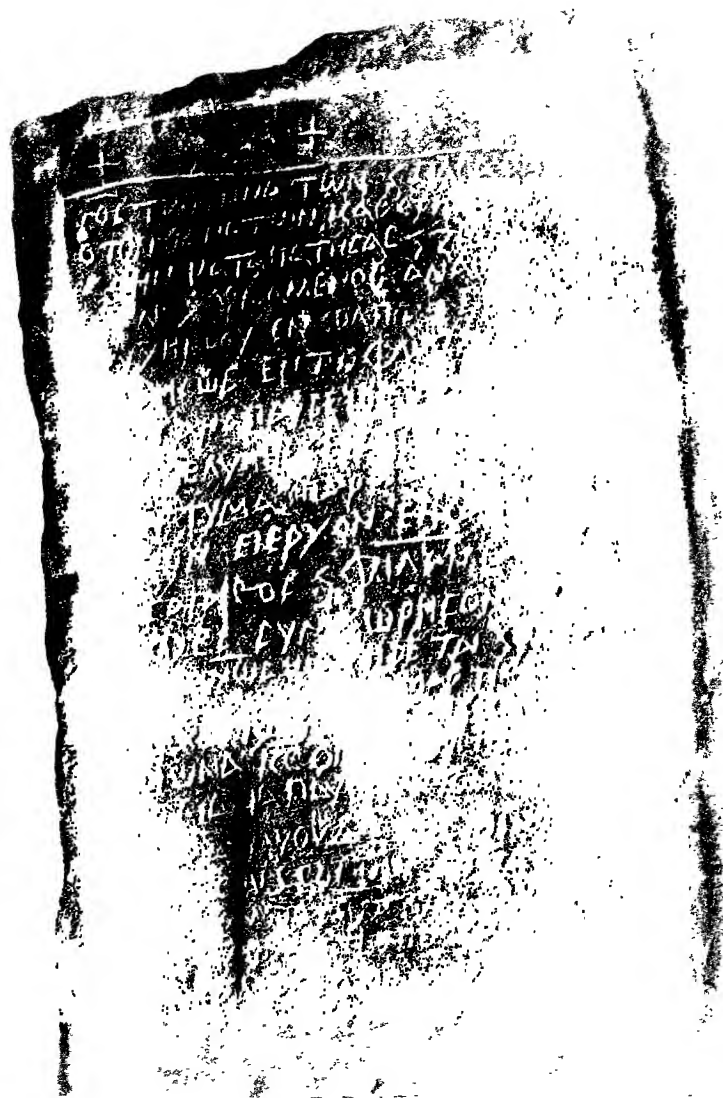


Fig. 1

on this epitaph were different from those with which we are familiar elsewhere. The writer apparently prayed that He Who was slow to condemn(?) would grant that the deceased might enter heaven with a band or choir of virgin saints, and on the last of the vertical lines asked God for pardon. A parallel to the choir of virgins, with the substitution of angels for virgins, is quoted in the *Dictionnaire d'archéologie chrétienne* of CABROL and LECLERCQ, s.v. *Inscriptions* (col. 683):—"Le chœur des anges apparaît sur une formule barbare, postérieure sans doute à l'invasion arabe, à Antinoë: 'Ο θεὸς ἀναπαύσεως τὴν ψυχὴν αὐτοῦ καὶ τοῦ χοροῦ τῶν ἀγγέλων. L'Eucologe Byzantin a l'équivalent:—ἐν φωτὶ κατὰταξον σὺν ταῖς χοροστασίαις ἀγγέλων σου."

Geographically, this inscription belongs to the same circle as the inscriptions collected by Lepsius at Wādī Ghazālī.

5. The fifth inscription (Plate lvii) was taken to Khartoum from Mailnarti more than twenty years ago. Mailnarti is a small island occupying a strategic position in the river a few miles upstream from Halfa: a battery was placed here during the Dervish campaign, and the name seems to be a corruption of Mikailnarti or the island of S. Michael, which is often mentioned by medieval writers. This inscription therefore carries us to an entirely different region and belongs to the Faras-Serra group.



Greek inscription from Mailnarti. Khartoum Museum.

The stone is of sandstone, and the lettering, as will be seen from the plate, is extremely bad and full of mistakes which it is hardly worth enumerating: the lapicide cannot have had more than the barest smattering of Greek, if that. The usual formulae occupy the first 17 lines: in line 18 we get the name of the deceased which reads apparently Mash-shouda Eisminna $\mu\alpha\sigma\sigma\omega\delta\alpha\epsilon\iota\sigma\mu\iota\eta\eta\alpha$; then, after the doxology, we find his age and date in the last few lines which I read as follows:

$\overline{\pi\upsilon\varsigma}$ $\alpha\mu\eta\nu$ $\epsilon\tau\iota$ $\tau\eta\varsigma$ $\zeta\omega\eta\varsigma$ $\alpha\upsilon\tau\omicron\upsilon$ $\epsilon\tau\iota$ for $\epsilon\tau\eta$
 $\eta\mu\epsilon\rho\alpha$ $\cdot\xi\cdot$ ι $\alpha\pi\omicron$ $\mu\alpha\rho$ ω $\pi\alpha\chi\omega\nu$
 $\mu\omicron\nu\omicron\varsigma$ ζ $\epsilon\lambda\lambda\epsilon\nu\eta$ $\iota\overline{\Gamma}$ $\alpha\nu\alpha$ $\mu\omicron\nu\omicron\varsigma$ for $\mu\eta\nu\omicron\varsigma$ $\epsilon\lambda\lambda\epsilon\nu\eta$ for $\epsilon\lambda\eta\nu\eta$
 $\pi\alpha\nu\varsigma\omicron\nu$ $\chi\epsilon\iota\alpha\kappa\iota\sigma\psi\iota$ \omicron $\overline{\theta\varsigma}$
 $\beta\omicron\eta\theta\omicron\varsigma$

and translate—*The years and days of his life were 60 (years) and 10 (days) From the martyrs 800 years the 7th of the month Pachon and the 13th lunar day. Give rest to Kheiakishshi, God our helper.*

The date will therefore be about 1080 A.D. Kheiakishshi, a new name, may be the name of the writer of the inscription or that of another person buried in the same grave.

I have to thank Mr. F. Addison, Conservator of Antiquities, Sudan Government, for photographs of inscriptions 2, 3 and 5. The photographs were taken, I believe, by Mr. P. Drummond several years ago.

THE MATHEMATICAL LEATHER ROLL IN THE BRITISH MUSEUM

BY S. R. K. GLANVILLE

With Plates lviii—lxii

In 1864 a series of papyri¹ were bought by the Trustees of the British Museum from Mr. David Bremner, into whose possession they had passed from the collection of Mr. A. H. Rhind, on the latter's death. They were obtained by Mr. Rhind at Thebes, some by excavation in the tombs of Shêkh 'Abd el-Kurnah; others he had bought in 1858. The latter were said to have been found by natives in a room "in the ruins of a small building near the Ramesseum"². One of these was the famous Rhind Mathematical Papyrus³: another was a hieratic leather roll (Pl. lviii, fig. 2), also of mathematical content, and is the subject of this paper⁴. There seems no reason to doubt the statement of its provenance.

The presence of the leather roll in the British Museum was common knowledge at the time of, or at any rate immediately after the publication of the first complete study of the papyrus⁵, for Eisenlohr states the fact when describing the papyrus, and adds that the leather was too brittle to unroll. Some years later Professor Griffith saw the roll and recognized a fine hand in the beginnings of numerical signs which could be seen just inside the edge. So that although there was still no means of unloosening the coil, there were yet no grounds for the curious scepticism as to its actual existence on the part of one of the most learned of living Egyptologists⁶. The question of unrolling was again brought up last year by Professor Griffith, who had heard, in Berlin, of a new treatment for softening ancient leather. In the interval between his first sight of the roll and his chancing on this German process, that whole department of archaeology which consists in the "restoration and preservation of antiquities" had been organized, and the brilliant successes of Lucas in the Valley of the Kings were being matched at home by research in the laboratory attached to the British Museum, and by the regular Reports of its

¹ They include, beside the well-known mathematical treatise, one other published work: the Papyrus of Nesi-Min, B.M. 10188, BUDGE, *Facsimiles of Egyptian Hieratic Papyri in the British Museum*, 1910.

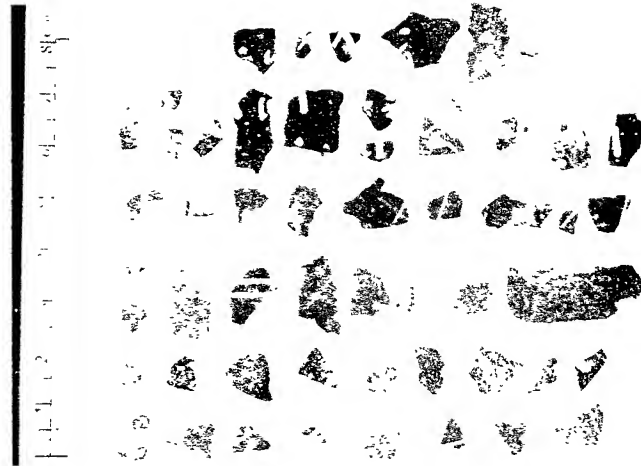
² BUDGE in *Facsimile of the Rhind Mathematical Papyrus*, Preface.

³ PEET, *The Rhind Mathematical Papyrus*; *q.v.* p. 1 for bibliography. In *Journal*, XII, 123 f. a long and exceedingly important review of Peet's book by Gunn forms an invaluable appendix to it.

⁴ The roll is numbered B.M. 10250. I have to thank Dr. Hall, by whose permission and at whose instance it is now published.

⁵ By EISENLOHR, *Ein mathematisches Handbuch der alten Aegypter*, 1877.

⁶ *Journal*, XII, 124, the note to "pp. 6-7." Why Gunn queried the statements as to its existence, made by Birch and repeated by Eisenlohr, one does not understand. He has, by the way, been far from just (apart from the matter of its arrangement) to the British Museum facsimile of the papyrus, which Peet rightly describes as "the admirable and almost perfect facsimile." In reproaching the facsimile with being "by no means an improvement on its predecessor," he ignores the fact that it was the original of the latter. Eisenlohr published, without the permission of the Trustees, a tracing of a proof of the facsimile lent him by Birch for purposes of study.

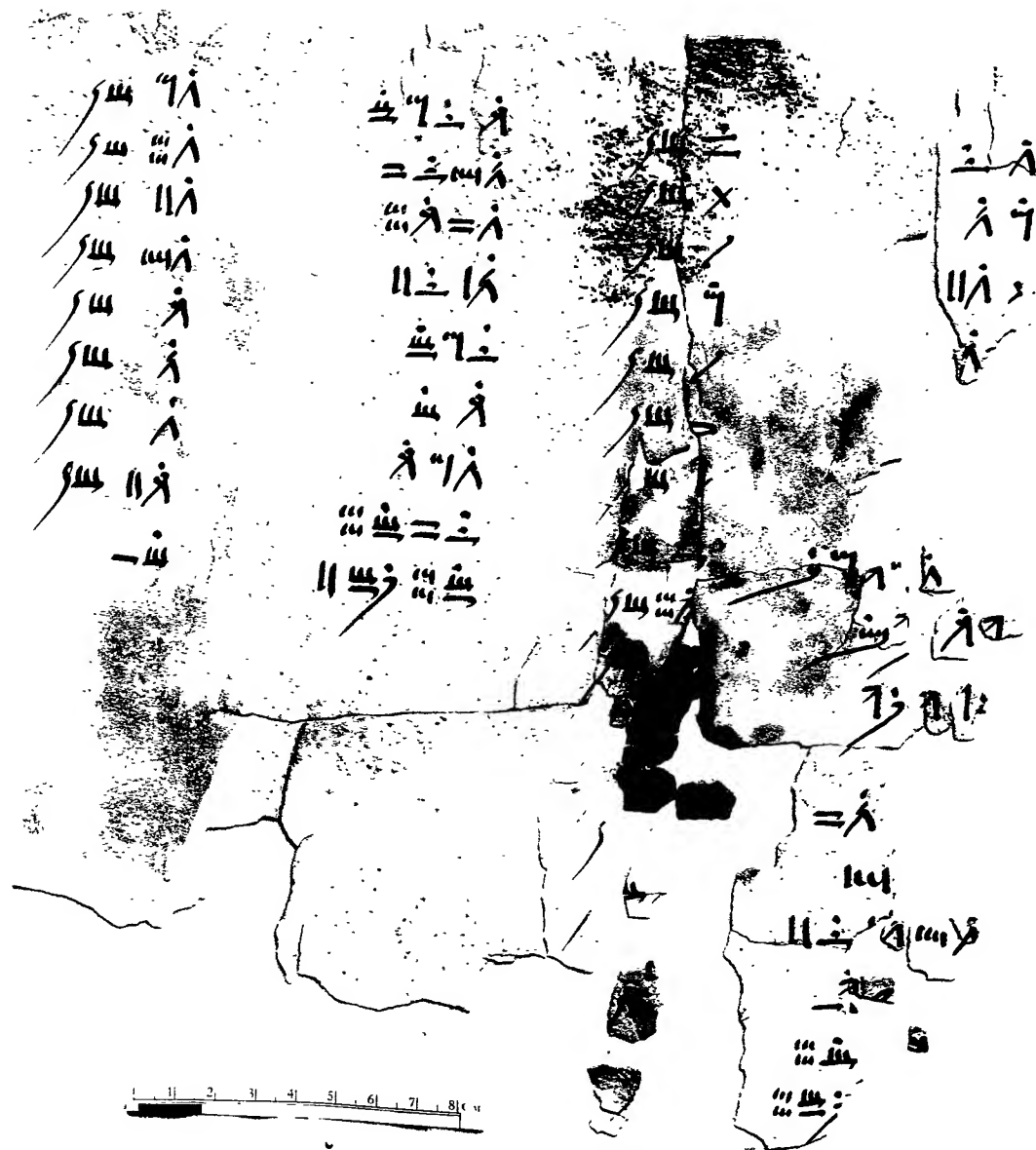


1



2

1. Leather roll, B.M. 10250 ; unplaced fragments.
2. Leather roll, B.M. 10250, before unrolling.



Leather roll, B.M. 10250 ; cols. 1 and 2.

Director, Dr. Alexander Scott, F.R.S., on the museum objects submitted for treatment. It was therefore possible to reconsider the unrolling of the leather roll. There had been no previous experience of inscribed leather in this condition, for ancient leather has usually "run" and is altogether in a far more glutinous state than that of the mathematical roll. Even with the most promising theories there was bound to be some risk. However Dr. Scott undertook to carry out the operation, and his account of the process, given in an addendum to this article (pp. 238-9), shows how completely he succeeded. From the scientific point of view it can hardly be denied that the dissemination of the knowledge of this chemical treatment of the leather is of greater value than the publication of the contents inscribed on it¹.

For Eisenlohr's optimistic suggestion² as to the nature of the roll makes the reality appear almost ridiculous. In place of the hoped for treatise on Egyptian mathematics which was to explain all the difficulties in the Rhind Papyrus, we have a copy in duplicate of 26 sums in addition of fractions!

The immediate nature of the text, of which a transcription and translation follow, is clear. It was complete, or virtually so, when it was discovered, and can still be restored with very few doubtful readings. It must be judged on its own merits, as it stands: it was not a part, however elementary, of a mathematical handbook. The alternative is an exercise (or "table"), the work of a junior official, not of a schoolboy, for the writing is far too good. But it is difficult to be sure of the reason for the exercise. Columns 3 and 4 have obviously been copied directly from columns 1 and 2, without any attention to the calculations set forth. This is suggested by the repetition of the error³ in the answer to the tenth sum (cols. 1 and 3, l. 10). The proof of the purely visual nature of the second copy is the omission of *pw* from the last sum of the series in each case (col. 2, l. 9 and col. 4, l. 7). The omission in the first instance can only be explained psychologically, and the ease with which it might occur will be familiar not only to copyists but to all who have laboured under a certain type of "imposition." A less obvious point of the same kind, but one equally within the experience of all, is the tendency to pack more and more writing into a page as the copying becomes more irksome. We are perhaps not ascribing too human a nature to the Egyptian if we see in the disparity between the number of sums in col. 1 and col. 3 a sign of his growing impatience with the task before him. It is, however, unlikely that the copying of this table twice over was imposed on the scribe as a punishment. He would be too old for such treatment. At the same time the reason for the double copy is not obvious.

Some help is to be obtained from the absence of any working out of the sums even in the more complicated examples, where at least we should expect notes of the quotients

¹ Cf. an account of the process by Dr. Scott in the *British Museum Quarterly*, II, No. 2.

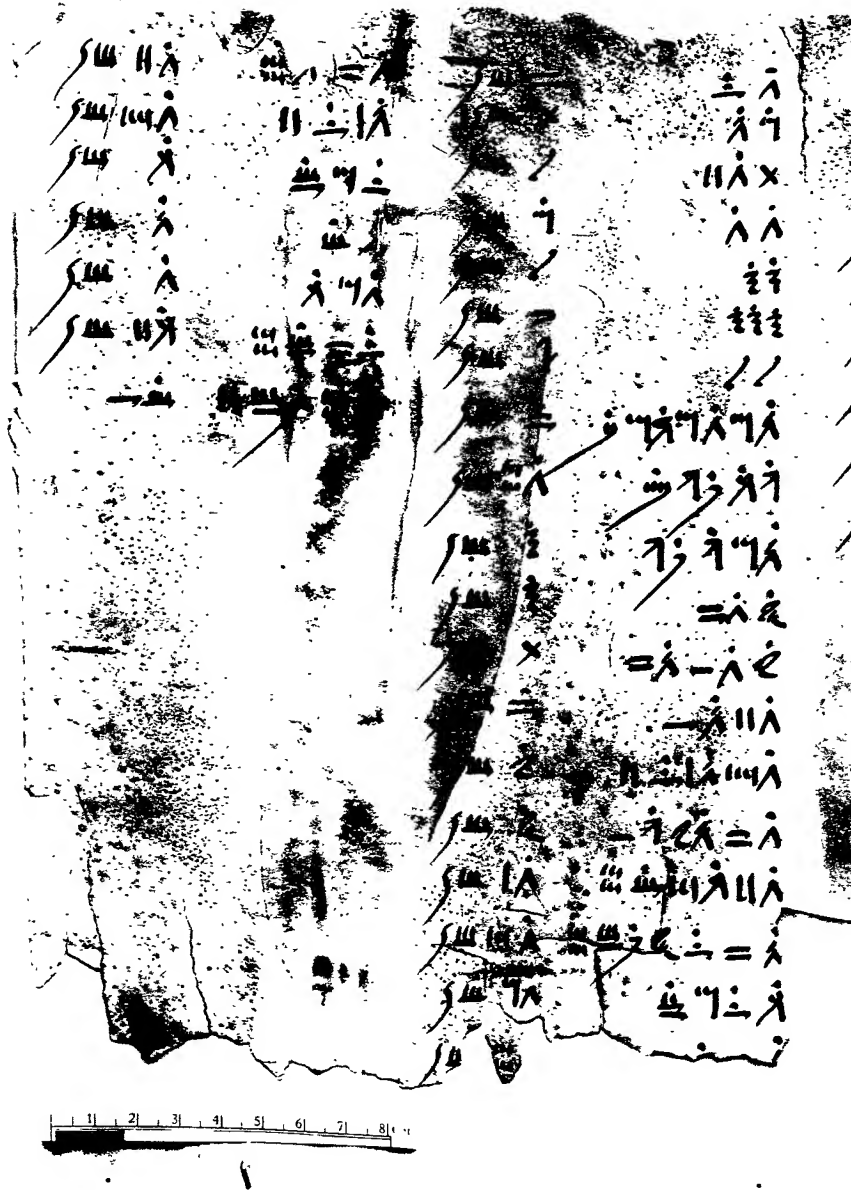
² *Op. cit.* 1, "perhaps the leather roll is the original of the papyrus roll." He obviously had no idea of the size of the former; but in any case his argument was based on a theory, which, if true, is at least only a partial statement of the case, that the use of leather as a writing material preceded that of papyrus in ancient Egypt. Most of our leather codices are as a matter of fact of the New Kingdom or later. (But cf. the evidence quoted by BIRCH, *Zeit. f. ag. Spr.*, 1871, 103 f. and 117 f.) Taking into consideration the fact that the papyrus is a self-admitted copy of an earlier document, Eisenlohr's hypothesis, on the evidence before him, was not unreasonable.

³ Those of col. 3, ll. 16 and 17, are also almost certainly repetitions: there is not room in col. 1, l. 17, to insert the necessary fraction (see Commentary, p. 237) $\frac{1}{16}$ between the $\frac{1}{24}$, $\frac{1}{48}$ (to be restored) and the existing $\frac{1}{16}$. It is therefore reasonable to assume that the error in the answer to this sum also existed in the first copy and was responsible for that in the second. Similarly one may assume that the scribe wrote $\frac{1}{12}$ instead of $\frac{1}{24}$ in col. 1, l. 16, in order to account for the corresponding error in col. 3, l. 16.

under the denominators, as in the Rhind Papyrus *passim*. This at first suggests that our text is an answer to a short examination paper, for which the (simple enough) rough work was to be done in the head or on a piece of broken pottery. But this would not account for the duplicate copy and must therefore be counted out. It is quite improbable, however, judging from the Rhind Papyrus, that in some of the examples given the ordinary scribe would arrive at the answer without some preliminary jottings, and the sums as stated in our text must therefore have been taken from a fuller edition of the series. This might mean that the scribe had studied the fuller statement of the sums and had made his first copy to test his knowledge of them—his second copy in this case would be simply an aid to memorizing the result of the first—a not very satisfactory explanation, for he would naturally have corrected the first copy from the original before proceeding with the duplicate. Or it might simply mean that he had made himself an abridged version of the series of sums, to be used as a table of reference in his official calculations, and that for convenience he required two copies of it—perhaps later to be divided, a consummation which may well have been given up when somebody pointed out the errors in three of the sums. Certainly the errors are more likely to have arisen in the course of copying than to be mistakes of memory. Thus the erroneous 6 in 1. 10 and 3. 10 might easily have been read from the answer to the sum in the next line; while the omission of one cypher—whether a 10 or a unit—which is responsible for two of the remaining three errors, is one of the easiest that copyists can make. The remaining error—the omission of the third term out of four (assuming my restoration to be correct) is equally intelligible when we see that the three preceding sums each contain only three terms. In each case a moment's thought given to the actual calculations would have shown that there was something wrong. If the sums had been memorized parrot-wise the mistakes could not have arisen at all: if memorized intelligently the intelligence would have been called in and the mistakes detected. The only conclusion is that they are the mistakes of the copyist. Our roll must therefore have been copied from a textbook as a practical guide, or table, in future work. Its real mathematical interest lies in discovering what would have been the use of such a table to the person armed with it, and further what was its relation, if any, to the Rhind Papyrus with which it was discovered. Such an inquiry must follow a more detailed discussion of the text itself.

The condition of the leather roll, the extreme measurements of which are $17\frac{3}{8}$ by $10\frac{1}{4}$ in., is described by Dr. Scott in his addendum. The writing, which is brilliantly clear throughout, except where (4. 4 and 7) the first signs are partly obscured by a dirty stain, closely resembles that of the Rhind Papyrus and is therefore of much the same date, *i.e.* the Hyksos period or at latest the beginning of the Eighteenth Dynasty (Pls. lix, lx). The story that the papyrus and leather rolls were found together seems then to gain plausibility, and suggests, though it does not imply, that they were connected in some way. It might be more reasonable to suppose that the house they were found in belonged to a mathematician or to an accountant.

As Dr. Scott points out, a large number of fragments have been unavoidably broken off one end of the roll since its discovery owing to its extremely brittle state. Many of these fragments were inscribed, and after the unrolling it was possible to fit some of them in their places, where they are shown in the photograph (Pl. lix). A considerable number of smaller fragments still remain unplaced, and the larger of these are arranged in the photograph on Pl. lviii, fig. 1. The three upper rows are recognizable signs, but as they would all fit several lacunae in the text, and it is impossible to decide between these from the edges of the breaks, I have not felt justified in attempting to place them.



Leather roll, B.M. 10250 ; cols. 3 and 4.

Column 2		Column 1		
90	④	90		1
90		90		2
90		90		3
90		90		4
90		90		5
90		90		6
90		90		7
90		90		8
		90		9
		90		10
		90		11
		90		12
		90		13
		90		14
		90		15
		90		16
		90		17

① emend to

② emend to

③ emend to

④ The incorrect form of the hieratic sign in the original (see photograph) with 2 vertical strokes instead of 3, occurs again in col. 3, l. 18, but nowhere else in the text.

TRANSLATION.

Cols. 1 and 2. Pl. lxi.

Column 1.			Column 2.		
1.	$\frac{1}{10} \frac{1}{40}$	it is $\frac{1}{8}$	1.	$\frac{1}{30} \frac{1}{45} \frac{1}{90}$	it is $\frac{1}{15}$
2.	$\frac{1}{5} \frac{1}{20}$	" $\frac{1}{4}$	2.	$\frac{1}{24} \frac{1}{48}$	" $\frac{1}{16}$
3.	$\frac{1}{4} \frac{1}{12}$	" $\frac{1}{3}$	3.	$\frac{1}{18} \frac{1}{36}$	" $\frac{1}{12}$
4.	$\left[\frac{1}{10}\right] \frac{1}{10}$, $\frac{1}{5}$	4.	$\frac{1}{21} \frac{1}{42}$	" $\frac{1}{14}$
5.	$\left[\frac{1}{6} \frac{1}{6}\right]$	" $\frac{1}{3}$	5.	$\frac{1}{45} \frac{1}{90}$	" $\frac{1}{30}$
6.	$\left[\frac{1}{6} \frac{1}{6} \frac{1}{6}\right]$	" $\frac{1}{2}$	6.	$\frac{1}{30} \frac{1}{60}$	" $\frac{1}{20}$
7.	$\left[\frac{1}{3} \frac{1}{3}\right]$	" $\frac{2}{3}$	7.	$\frac{1}{15} \frac{1}{30}$	" $\frac{1}{10}$
8.	$\left[\frac{1}{25}\right] \frac{1}{15} \left[\frac{1}{75}\right] \frac{1}{200}$	" $\frac{1}{8}$	8.	$\frac{1}{48} \frac{1}{96}$	" $\frac{1}{32}$
9.	$\left[\frac{1}{50}\right] \frac{1}{30} \left[\frac{1}{150}\right] \frac{1}{400}$	" $\frac{1}{16}$	9.	$\frac{1}{96} \frac{1}{192}$	$\frac{1}{64}$ *
10.	$\left[\frac{1}{25}\right] \left[\frac{1}{50}\right] \frac{1}{150}$	" $\frac{1}{6}$ <i>sic</i>			
11.	$\left[\frac{1}{9}\right] \left[\frac{1}{18}\right]$, $\frac{1}{6}$			
12.	$\left[\frac{1}{7}\right] \left[\frac{1}{14}\right] \frac{1}{28}$	" $\frac{1}{4}$			
13.	$\left[\frac{1}{12}\right] \left[\frac{1}{2}\right] \frac{1}{4}$, $\left[\frac{1}{8}\right]$			
14.	$\frac{1}{14} \frac{1}{21} \frac{1}{42}$	" $\left[\frac{1}{7}\right]$			
15.	$\left[\frac{1}{18} \frac{1}{2}\right] \frac{1}{54}$	" $\left[\frac{1}{9}\right]$			
16.	$\left[\frac{1}{12} \text{ sic? } \frac{1}{33}\right] \frac{1}{66}$	" $\left[\frac{1}{11}\right]$			
17.	$\left[\frac{1}{28} \frac{1}{49}\right] \frac{1}{196}$, $\left[\frac{1}{13} \text{ sic? } \right]$			

* *Sic*; without "it is."

TRANSLATION.

Cols. 3 and 4. Pl. lxii.

Column 3.		Column 4.	
1.	$\frac{1}{10} \frac{1}{40}$	it is $\frac{1}{8}$	1. $\frac{1}{18} \frac{[1]}{36}$ it is $\frac{1}{12}$
2.	$\frac{1}{5} \frac{1}{20}$	" $\frac{1}{4}$	2. $\frac{1}{21} \frac{1}{42}$ " $\frac{1}{14}$
3.	$\frac{1}{4} \frac{1}{12}$	" $\frac{1}{3}$	3. $\frac{1}{45} \frac{1}{90}$ " $\frac{1}{30}$
4.	$\frac{1}{10} \frac{1}{10}$	" $\frac{1}{5}$	4. $\frac{1}{30} \frac{1}{60}$ " $\frac{1}{20}$
5.	$\frac{1}{6} \frac{1}{6}$	" $\frac{1}{3}$	5. $\frac{1}{15} \frac{1}{30}$ " $\frac{1}{10}$
6.	$\frac{1}{6} \frac{1}{6} \frac{1}{6}$	" $\frac{1}{2}$	6. $\frac{1}{48} \frac{1}{96}$ " $\frac{1}{32}$
7.	$\frac{1}{3} \frac{1}{3}$	" $\frac{2}{3}$	7. $\frac{1}{96} \frac{1}{192}$ $\frac{1}{64}^*$
8.	$\frac{1}{25} \frac{1}{15} \frac{1}{75} \frac{1}{200}$	" $\frac{1}{8}$	
9.	$\frac{1}{50} \frac{1}{30} \frac{1}{150} \frac{1}{400}$	" $\frac{1}{16}$	
10.	$\frac{1}{25} \frac{1}{50} \frac{1}{150}$	" $\frac{1}{6}$ <i>sic</i>	
11.	$\frac{1}{9} \frac{1}{18}$	" $\frac{1}{6}$	
12.	$\frac{1}{7} \frac{1}{14} \frac{1}{28}$	" $\frac{1}{4}$	
13.	$\frac{1}{12} \frac{1}{24}$	" $\frac{1}{8}$	
14.	$\frac{1}{14} \frac{1}{21} \frac{1}{42}$	" $\frac{1}{7}$	
15.	$\frac{1}{18} \frac{1}{27} \frac{1}{54}$	" $\frac{1}{9}$	
16.	$\frac{1}{12}$ <i>sic</i> $\frac{1}{33} \frac{1}{66}$	" $\frac{1}{11}$	
17.	$\frac{1}{28} \frac{1}{49} \frac{1}{196}$	" $\frac{1}{13}$ <i>sic</i>	
18.	$\frac{1}{30} \frac{1}{45} \frac{1}{90}$	" $\frac{1}{15}$	
19.	$\frac{1}{2[4]} \frac{1}{4[8]}$	" $\frac{[1]}{[1]6}$	

* *Sic*; without "it is."

Column 4		Column 3		
𐤁𐤍 𐤀	[𐤀] 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	1
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	2
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	3
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	4
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	5
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	6
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	7
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	8
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	9
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	10
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	11
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	12
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	13
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	14
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	15
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	16
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	17
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	18
𐤁𐤍 𐤀	𐤀𐤀 𐤀	𐤁𐤍 𐤀	𐤀𐤀 𐤀	19

① emend to 𐤀

② emend to 𐤀

③ emend to 𐤀

④ See note (on plate) to col. 2, l. 1.

⑤ Clearly legible in original.



COMMENTARY.

It will be seen that the same formula is used throughout. This is again in favour of the theory that the text is a table. The formula, though simple enough, is unusual. Ordinarily in setting out simple sums of this kind the Egyptian did not use any term or sign for =, but merely juxtaposed the numbers concerned. On the other hand when stating a more complicated problem the whole process might be described in literary rather than numerical writing; but in that case where we should say =, he used the phrase *hpr f* (or *hpr-hr f*) *m X*. "it becomes *X*," or *hpr hr X*, "*X* results¹." To distinguish the formula of our text from the full one and from the simpler unexpressed = of the Egyptian, we might translate by the school-book formula $\frac{1}{x} + \frac{1}{y}$ makes $\frac{1}{z}$: but for the sake of accuracy the literal rendering of the Egyptian is retained in the above translation.

Cols. 1 and 3, ll. 10, read $\frac{1}{15}$ for $\frac{1}{6}$ in the answer. The $\frac{1}{6}$ of the following answer is probably responsible for the mistake.

Cols. 1 and 3, ll. 16, read $\frac{1}{32}$ for $\frac{1}{12}$ in the first term.

Cols. 1 and 3, ll. 17: The restoration here is not so obvious. The three terms of the sum as stated here not only do not make the answer given, but total up to $\frac{1+2}{1 \cdot 3 \cdot 6} = \frac{3}{4}$, a number which cannot be stated as a single fraction in Egyptian notation. It would be possible to alter the *sum* so as to produce the given answer, but this would mean a radical change in the factorisation of the denominators, which on the face of it is highly improbable.

If we assume on the other hand that the denominators are correct as they stand, and that 196 was originally the highest, then the denominator in the answer must consist of one, or a combination of two or more, of the factors of 196. And since the addition of the fractions actually stated amounts to roughly $\frac{1}{16}$, it is probable that the denominator in question is somewhere in the neighbourhood of 16. The factors of 196 being $2^2 \times 7^2$, the nearest solution on these lines will be 2×7 —in other words the answer is $\frac{1}{14}$ instead of $\frac{1}{13}$. Then since the given fractions amount to $\frac{13}{196}$, and $\frac{14}{196}$ ($= \frac{1}{14}$) is required, the difference, $= \frac{1}{196}$, must be inserted in the statement of the sum. The sum then should in my opinion be restored: " $\frac{1}{28} \frac{1}{49} \frac{1}{98} \frac{1}{196}$ it is $\frac{1}{14}$." The bulk of the sum stands as stated, and the two errors are of a kind which we have already seen to occur elsewhere in the text and know to be the common snare of copyists.

Although the formula has been stated as $\frac{1}{x} + \frac{1}{y} = \frac{1}{z}$, it is clear that the object of the text was not merely to supply a ready-made table of the addition of certain fractions, for the denominators in almost every case are all multiples of the first term of the sum in question. Such an elaborate table would only be worth while in the case of fractions whose L.C.M. (or its Egyptian equivalent, namely—with few exceptions—the largest denominator) was less easy to manipulate. Moreover this self-evident factorisation of the denominators hints at the existence of a longer process of which our sums are abbreviations conceded for the sake

¹ Berlin Pap. (*Zeitschr. f. äg. Spr.*, xxxviii, 136, *passim*) is quoted by PEET, *op. cit.*, 14, for an example of subjectless *hpr-hr m X* and paralleled by GUNN, *Journal*, xii, 125. PEET (*ibid.*) also notes two examples in Rhind of the more elaborate formula, common in the Twelfth Dynasty (see GRIFFITH, *Hieratic Papyri from Kahun and Gurob*, Pl. viii, *passim*), *hprt lm pr X*, "*X* is what results from it." In this and in our formula, *X pw*, *X* is the logical predicate, and it is possible that the shorter phrase is an abbreviation of the longer, although *pr* as impersonal pronoun (in the latter) has a slightly different grammatical function.

of succinctness in the table. Thus the first two sums can be expressed as $\frac{1}{x} + \frac{1}{4} \left(\frac{1}{x} \right) = \frac{1}{y}$, or $1\frac{1}{4} \left(\frac{1}{x} \right) = \frac{1}{y}$. Similarly the last eight sums can be expressed by the equation $1\frac{1}{2}x = \frac{1}{y}$. From the two equations quoted it will be seen that the multiplier of the first term is not the same throughout. The writer takes a fraction and then adds one or two more fractions (in one or two cases vulgar fractions) of that fraction to it. In other words he is multiplying his original fraction by some number greater than (because it includes) itself. But there is apparently no system in the choice of this multiplier; nor in the choice of the multiplicand, except where the answer of one sum has obviously suggested itself for the beginning of the next, or a whole sum is a replica of its predecessor except for the doubling or halving of the denominators throughout, etc. In calculations where the notation and measures demanded such constant use of aliquot parts and factorisation, a table like ours, giving a series of common fractions added to fractions of themselves with conveniently small fractions in the resulting answers, must have been of considerable practical value. Here comes in the logical if not the actual connection with the Rhind Papyrus. The equation found in cols. 1 and 3. ll. 12 of our text, gives precisely the same sum as the No. 11 in PEET, *op. cit.*, 56. This occurs in the first group of "Examples of completion" (*skm*), and is there written out in full. Thus in the papyrus we get:

$$\begin{array}{rcl} 1 & & \frac{1}{7} \\ \frac{1}{2} & & \frac{1}{14}^1 \\ \frac{1}{4} & & \frac{1}{18} \text{ sic} \\ \text{Total } \frac{1}{4}, & & \end{array}$$

where $\frac{1}{7}$ is multiplied by $1 + \frac{1}{2} - \frac{1}{4}$, and the total correctly made to come to $\frac{1}{4}$. This is precisely the same as the leather roll's " $\frac{1}{7} \frac{1}{14} \frac{1}{28}$ it is $\frac{1}{4}$," except that in the latter the multiplication step is implicit in the setting out of the sum. Our table thus resolves itself into an abbreviated series of *skm*-examples, the originals of which must have been exactly comparable to the simpler problems contained in Pl. G of Peet's edition of the papyrus (*cf.* Pls. vii and viii of the B.M. *Facsimile*). Whereas the papyrus gives the working of the sums with a title describing their nature, the leather roll is content with the shortest statement of the sum that the figures will allow. The one is the teacher's text-book; the other is a handy table for popular use.

ADDENDUM.

Dr. Alexander Scott, D.Sc., F.R.S., supplies the following information on the method used in unrolling the manuscript:—

"The leather on which the B.M. Manuscript 10250 is inscribed is of a pale cream colour and extremely brittle. Its brittle state had resulted in considerable damage to the ends of the roll and the formation of many small fragments. It was obvious that none of the ordinary methods recommended for softening hard leather, such as impregnating with oil² or vaseline, would be of any avail here. The only chance of success in

¹ Corrected from $\frac{1}{8}$, whence the erroneous $\frac{1}{18}$, which should read $\frac{1}{28}$. (An error of the same type as our own above.)

² That recommended to Professor Griffith (see above, p. 232) was of this nature.

unrolling the manuscript lay in finding some binding material which in itself would supply a tough and transparent film to the particles of the leather. The point on which there seemed to be some risk of failure was the possible case of the occurrence of excessive moisture in the atmosphere before the leather had been completely treated. Work on the roll was therefore not undertaken until the early part of this summer.

Solutions of celluloid of such limpidity that they could thoroughly penetrate the substance of the roll were found to be without any action on the writing, and to dry readily in the leather. By giving several coatings of a 2 per cent. solution of celluloid in equal volumes of amyl acetate and acetone by means of a soft brush in such a manner as to prevent the convolutions adhering to one another it was possible to build up a strong and continuous film of celluloid in the pores of the leather. To give additional strength, and to enable the roll to be handled more freely, arrangements were made to fasten it to a length of "butter muslin" which had also been prepared with a similar celluloid film. To accomplish this a much stronger celluloid solution (about 6 per cent.) was applied to act as the cementing material. As this dried it tended to contract considerably and this, aided by a slight expansion of the celluloid in the roll due to the penetration of some of the solvent, led to the complete unrolling of the manuscript without difficulty and without a break in its continuity. During the unrolling its progress had to be carefully watched and the strong solution applied so as to prevent warping and to ensure uniform uncurling. Finally when almost flat it was pressed between two glass plates and dried in this position. When quite dry it remained flat and, as it is now practically waterproof, it should remain so indefinitely in spite of weather variations.

Examination under the microscope proves clearly that the material is an animal skin, many of the hairs and their roots being easily seen. It may be possible, therefore, on a more thorough examination, to identify the animal species from which the skin was derived. It is remarkable that no gelatinization of the leather had occurred. The process used originally to preserve the skin is unknown, but the experiments made so far seem to indicate that it was not by means of "tanning" as we understand this term.

There seems little doubt that the method described above might be employed for strengthening and unrolling ancient manuscripts on papyrus and similar materials. The photographs show the roll before and after the operations."

SOME PREDYNASTIC CARVINGS

BY G. D. HORNBLOWER

With Plates IV, figs. 1 and 3—5, and LXIII

Plate LXIII represents a hippopotamus tusk¹, 5½ inches long, carved at the tip with a man's head, with heavy beard; it was bought in Cairo and is now in the Royal Ontario Museum of Archaeology, Toronto, to the Director of which, Professor C. T. Currelly, I am indebted for permission to publish it.

The best known examples of the kind are in the University College Museum, London, and are illustrated in PETRIE, *Prehistoric Egypt*, Pl. i; Cairo Museum has none. The Sequence Dating period suggested for them by Professor Petrie is 35 to 40 (*op. cit.*, par. 13).

The specimen here illustrated exhibits more clearly defined features than others, and is for that well worthy of record. Its general features are the same as those of Figs. 4 and 5 of the plate mentioned, though the beard is heavier; the nose is broad, the lips coarse and the upper lip shaven. The type is apparently Northern Semitic and very similar to that of the gods of the Sumerians, who, though themselves clean-shaven, represented their gods as heavily bearded and, apparently, as Semitic². These gods also exhibit shaven upper lips, as in the Vulture Stela of the Louvre³.

Of other predynastic figures known, there can be little doubt that the heroic figure, between two lions, carved on the famous knife-handle of hippopotamus ivory, found at Gebel el 'Araḳ and now in the Louvre⁴, is of the same race as the men of the tusks, though the smallness of the object, combined with the ravages of time, make it impossible to define precisely the character of the nose and mouth. Full recognition has been given to the Mesopotamian elements figuring on this object and to their parallels in Upper Egyptian remains, the heraldic pose of man and lions⁵, and the Mesopotamian dress⁶,

¹ Many of the smaller ancient Egyptian objects in museums catalogued as of ivory are really carved from hippopotamus tusks. The distinction is of some importance; objects of the latter material must have originated in Egypt, since countries in Western Asia having elephant ivory at their disposal would not import such small masses of material as hippopotamus tusks afford. The origin of the Gebel el 'Araḳ knife-handle, on this count alone, must be set down as Egyptian.

It would be well if the material of all such objects in museums were properly ascertained.

² L. W. KING, *A History of Sumer and Akkad*, 47-8 and Fig. 12. Later researches show that the earliest Sumerians known to us did not shave off their face-hair. For a general survey of beards worn in the ancient East, Dr. Frankfort has drawn my attention to HUGO MÖTEFINDT, *Zur Geschichte der Barttracht im Alten Orient*.

³ HEUZÉY, *Antiquités chaldéennes*, No. 10, D 2; see also no. 25.

⁴ *Monuments et mémoires, Fondation E. Piot*, XXII, Part 1, Fig. 16, and *Ancient Egypt*, 1917, Part 1, 29 and Fig. 4.

⁵ On the wall of a tomb; see *Hierakonpolis*, II, Pl. lxxvi; also J. CAPART, *Les débuts de l'art en Égypte*, 1904, 200 and Fig. 146.

⁶ On a palette in the British Museum; see CAPART, *op. cit.*, 232, Fig. 163; the ivory figure in the British Museum of a First Dynasty king, see *Abydos*, II, Pl. xiii, and CAPART, *op. cit.*, 154, Fig. 112; on



Hippopotamus tusk carved at the tip with a man's head ;
predynastic. *Scale 1.*

but one detail seems to have been hitherto passed over, namely the race of hounds, very un-Egyptian but recognizable in the breed roughly sculptured on an early Mesopotamian vase in the British Museum, No. 118,466¹.

The knife-handle also bears witness to the influence of another country, Somaliland, for the lions are heavily maned, as in all early Egyptian art, and show affinity, not to the Mesopotamian variety, which has a poor mane, but to that of Somaliland, the thickest maned of all². Connection with this country is shown again in another Egyptian monument of about the same period: on the fragment of a carved palette in the Ashmolean Museum³ is a long-necked animal identified by the authorities of the British Museum, Natural History Section, as the *gerenuk*⁴, a member of the gazelle race found only in Somaliland. This palette bears a further element of present interest, the date-palm, which was the special product of Southern Mesopotamia⁵ and may have been thence introduced into Egypt.

In early Sumerian monuments an excellent parallel to the type represented on the tusk and knife-handle is seen in the head of a god on a monument of Ur-nammu (Ur-engur), founder of the Third Dynasty of Ur. It appears in the lower register of his great stela found at Ur and described by C. Leonard Woolley in *The Antiquaries' Journal*, v, 398-9, and Pl. xlviii⁶, to whom I am indebted for permission to reproduce it in Pl. Iv, fig. 1. The type is general at this period.

A later head, of the proto-dynastic age, resembling that on our tusk in every point except the nose, is that of the captive on a long ivory slip found by Petrie at Abydos⁷; the nose is much curved and it would seem that by this time the lordly new-comer

an ivory plaque from a royal tomb of the First Dynasty at Abydos, see PETRIE, *Royal Tombs*, II, Pl. IV, and CAPART, *op. cit.*, 245, Fig. 174 (in this case the man wearing the robe has a long beard). In all these examples the robe is embroidered, as if for persons of high dignity.

In the British Museum is an ivory figurine, No. 32143, of a woman carrying a child, illustrated in the *Guide to the Egyptian Collections*, 1909, Fig. 9, and CAPART, *op. cit.*, 162, Fig. 118. Her dress is long and folded over one shoulder in a Mesopotamian style; it is adorned by long pointed strips, as a fringe, on the upper edge, as in some early Mesopotamian dresses; see W. ANDRAE, *Die archaische Ishtar-Tempel in Assur*, Pl. 37, where the long woman's robe, which however covers both shoulders, has, round the top edge, three or four rows of the pointed strips of the *kannakes* (this is apparently a cloth dress adorned with strips, often pointed, of fleece or cloth). The long robe covering only one shoulder is seen in Fig. 75, p. 101, of the same work, here quoted because it deals with a very early period. The object figured in *Prehistoric Egypt*, Pl. 1, Fig. 3, may also represent in a rough manner a skirt or dress of the *kannakes* type. A Mesopotamian marble statuette in the British Museum, dated about 2800 B.C., shows the long pointed strips at the bottom of a plain robe. (*Illustrated London News*, Nov. 15th, 1924, and *Report of the National Arts Collection Fund* for 1924, No. 479; it also appears on other early monuments, such as that alluded to on p. 245, n. 2.)

¹ *The British Museum Quarterly*, II, No. 1, Pl. vi b.

² I owe this information to Captain Dollman, of the British Museum (Natural History), who suggested that the impossibly extended mane with which the early monuments endow lions may have been suggested by the thick upper fur of the Hamadryad Baboon, found in Arabia and Somaliland, also in Abyssinia. The artist of the Gebel el 'Araḳ carving may perhaps have selected the Somali lion, though knowing well the other, for its greater impressiveness.

³ CAPART, *op. cit.*, 231 and Fig. 164, which illustrates the lower part.

⁴ *Guide-book to Great Game Animals*, 1913, 39, Figs. 21-22.

⁵ *The Cambridge Ancient History*, I, 207, 361 and 543 ff.

⁶ Published in the *Illustrated London News* of April 18th, 1925, on a larger scale.

⁷ PETRIE, *Royal Tombs*, I, 23-4, Pls. xii and xvii. It is of course possible that this captive came by way of Palestine and is from a different region of Western Asia from that whence came the men of our tusks.

of the tusks and of the Gebel el 'Araḳ carving had descended to the rank of a mere foreigner, to be warred with when necessary, and that at least some of his race carried the prominent nose early impressed on the Northern Semites by intermarriage with Armenoid neighbours or immigrants.

The strange basalt figure from the MacGregor collection¹, now in the Ashmolean Museum, wearing the *karnata*, is of a vaguer type, unlike those dealt with above, yet not of Egyptian character; the head has a general resemblance to early Sumerian ones, such as that from Assur now in the Berlin Museum, illustrated in W. ANDRAE, *Die archaische Ishtar-Tempel in Assur*, Pls. 30-31, or those in L. KING, *Sumer and Akkad*, pp. 40 and 42. The false beard and *karnata* are significant elements, showing that the person had adopted, or been born into, Egyptian customs. The beard, we have seen, was a sign of divinity in Sumerian representations; it is curiously emphasized in the beautiful gold amulet of a bull lying down, found last winter at Ur by the Joint Expedition of the British Museum and the Museum of Pennsylvania University. This creature, which is dated at about 3100 B.C., has a false beard, gloriously curled, fastened by a string bound round his nose; thus is he identified with the Divine Bull. In later times this unsophisticated method of indicating divinity was abandoned and the bulls were given men's heads, with equally splendid beards². The beard, then, was connected in the earliest times of Mesopotamia with divinity and, especially, with gods of Semitic type, and we know how it was esteemed in ancient Egypt, being retained ceremonially by the kings and nobles of a shaven people—perhaps at first by kings only, as a mark of their divinity. Even at the present day, in the Near East, the beard, though little worn, is an object of consideration, and one of the commonest oaths is "by the life of my beard."

If we look for modern heads of the type here dealt with, we shall find them among the Arabs, for example the Kabâbish or the Arabs of Zanzibar of aristocratic Maskat lineage, as recorded in papers by Professor C. G. Seligman³, both of whose examples bear great likeness to the features of our tusk. The Kabâbish are a mixed race, but the general type, as shown by Professor Seligman, is fairly near to the specimens I have mentioned.

The suggestion has been made by Professor Petrie⁴ that these tusks formed part of a medicine-man's equipment and are perhaps of the nature of "soul-catchers"; in this he is seconded by M. Capart, who adds a modern example from Africa, the tusk being hung to a woman's neck and called by her "her soul"⁵. Dr. W. Max Müller describes them as "bearded deities, much used for amulets"⁶.

A much simpler view was taken by de Morgan, who says⁷: "With the tusk-shaped pendants we must class the long hollow ivory sticks clumsily representing the figure of a man; the wider part was closed with a stopper of a resinous substance and the hollow contained colouring matters, such as sulphide of antimony." This view is corroborated by the fact that most of the known examples show grooves cut round the tusk close to

¹ No. 1621 and Pl. xlv in the *Sole Catalogue*, 1922; see also CAPART, *op. cit.*, 44 and Fig. 20.

² HECZEY, *op. cit.*, Nos. 120 and 126, and *The Antiquaries' Journal*, iv, Pl. xlv a.

³ In "Some Aspects of the Hamitic Problem in the Anglo-Egyptian Sudan," *Journal of the Royal Anthropological Institute*, XLIII, 1913, Pl. xxxvii, Figs. 3 and 4, and, for the Zanzibar Arabs, XLVII, 1917, Pl. xi, Fig. 5.

⁴ *Nagada and Ballas*, 47.

⁵ *Egyptian Mythology*, 22, Fig. 2.

⁷ *Recherches sur les origines de l'Égypte*, 33.

⁶ CAPART, *op. cit.*, 191.

the hollow end, probably to allow of a membrane or piece of cloth or leather being tied round the open mouth to secure the contents¹.

Comparison may be made with the tip of a pre-dynastic ivory tusk, recently bought at Abydos and now in a private collection; it is carved into the shape of a standing hippopotamus (Pl. lv, fig. 3). It is unfortunately a mere fragment; the top is missing, and it is impossible to say whether it was furnished with a groove near the rim, or with holes bored through the rim; if the latter, it may supply an explanation of the small hippopotamus figures in ivory or stone, of the predynastic age, which have on the back a raised ring, pierced horizontally with holes². These rings may well be the vestiges of an original tusk-vessel and the object, from being a vessel held in special consideration, has become a mere amulet—a not unusual process in antiquity. The hippopotamus would be chosen as being, in some parts of Upper Egypt, a sacred animal.

If we may take modern parallels as support to this view of the use of the carved tusks, we can point to an African example in the University College Museum itself, where Professor Petrie has placed a modern tusk, carved at the tip with a human head, for comparison with the predynastic ones; it was used to hold snuff. Professor Seligman, in a letter, instances the antelope horns used by many African tribes, which are hung round the neck to hold "medicines," and thinks that this was the use of our carved tusks. The plain tusks of predynastic age³ were almost certainly used as vessels, having either holes bored near the rim or a groove cut just below it—some examples have both—the holes, as Mr. Glanville has suggested, were perhaps for suspension. These tusks, too, have given rise to amulets; see PETRIE, *op. cit.*, Pl. xxxiii. They are of early date and probably precede the carved examples.

The carved tusks must have been, from their material and decoration, valuable objects, intended for rare and precious contents, such as the life-giving incense⁴, imported eye-paint and the like; the heads carved may be taken to represent the type of men, of a higher culture, who imported these rarities, receiving from the natives special consideration and even veneration. Coming from Mesopotamia, these men must have had organized settlements in South Arabia and Somaliland; they probably imported other valuable articles not found in Egypt, such as lapis lazuli from Persia and obsidian from Somaliland. Their own purpose in trading would be to procure those objects of great desire, gold and copper⁵, perhaps, also, stones lacking in their own country, such as basalt and the like, and oriental alabaster, for luxury purposes. They appear to be of Northern Semitic origin. Their intercourse constituted a peaceful pene-

¹ If the substance referred to by de Morgan was indeed sulphide of antimony, it was intended for black eye-paint. This substance is not native to Egypt, and must have been imported and precious. The usual material for eye-paint was galena; see A. LUCAS, *Ancient Egyptian Materials*, 59-61. The paint itself must certainly have had a magico-religious virtue; it has always had special value in the Near East, sustained in later days by reported sayings of the prophet Mohammed.

² See, for examples in ivory, *Prehistoric Egypt*, Pl. ix, Figs. 29-31, and CAPART, *op. cit.*, Fig. 125. The objects there are flat and thin; in a note at the end of this article will be found an account of an example in marble in the full round. I have not been able to trace a perfect specimen of a tusk-vessel carved with a hippopotamus; perhaps the publication of this fragment will lead to the disclosure of some.

³ *Prehistoric Egypt*, 33, and Pl. xxxii.

⁴ For South Arabia as the home of incense, reference should be made to W. SCHOFF's translation of the *Periplus*, New York, 1912, 117-119, 120-126, and 144-146. Of special interest are the religious tabus and rites connected with its harvesting, as recorded by Pliny (p. 125) and, in modern times, by J. T. Bent (pp. 142-3); also the observations of W. Robertson Smith in *The Religion of the Semites*, 427.

⁵ H. FRANKFORT, *Studies in Early Pottery in the Near East*, I, 37.

tration of the higher culture of the Mesopotamians, accentuated in the latter part of the predynastic age. The consequent enhancement of culture in Upper Egypt made possible the conquest of the Delta, whose culture was, as many think, higher than that of Upper Egypt in the remoter periods. The recent discoveries at Ur will be generally held to fortify the theory of higher Mesopotamian culture, especially if the doubts as to chronology can be cleared up.

There is much well-known material evidence for very early intercourse between Egypt and Mesopotamia—cylinder-seals, brickwork, beasts with serpentine necks interlaced, etc.; it has been admirably summarized and weighed by Dr. H. Frankfort¹, whose contribution of special value is his treatment of the important matter of the shipping used². To him the reader is referred for an account of these points; it will be seen that he reaches, in general, the conclusion outlined above.

In further support of this conclusion, other points of evidence may be adduced, as follows.

The prevalence of brachycephalous skulls in South Arabia has been noted by Professor Seligman in one of the papers above mentioned³; it may be held that they are accounted for by ancient settlements of Mesopotamians in that country. Again, all the few cylinder-seals known bearing Sabaean inscriptions are in the purely Mesopotamian style of art⁴, and, coming to modern times, it is perhaps not without significance that the ancient Mesopotamian fashion of wearing the beard and shaving the upper lip is still maintained in South Arabia and Somaliland⁵.

Turning again to Egypt itself, in the primitive statues of the god Min found by Petrie at Koptos⁶ there is a significant detail in the nakedness of the god, clad only with a girdle. Now, in early Mesopotamian art the hero known to us as Gilgamesh is naked or girt with a belt⁷, sometimes with ends hanging down as in the statues of Min. Min, too, like Gilgamesh, is bearded. On the statues are figured Red Sea shells, the significance of which has always been fully appreciated; it is accentuated by the numbers of these shells found in predynastic graves, for example, in PETRIE, *Six Theban Tombs*, the lists of shells found in such graves give 25 species from the Red Sea and Indian Ocean, ten from the Nile and only three from the Mediterranean—there are two species of land-shells. This fact indicates with some certainty that in predynastic times Upper Egypt had greater trading connection with the Red Sea than with the Delta, which was perhaps of a somewhat hostile disposition and had developed cultural connections of its own, by way of the Mediterranean.

Some minor details may be mentioned, such as the technique of inlay in stone or shell, so marked in the treatment of eyes in early Egyptian monuments, face-shaving, the use of face-paints⁸: singly, these details may be of small significance, but, coming together with the rest of the evidence, they may be surely taken as corroborative.

¹ H. FRANKFORT, *op. cit.*, 116–142.

² For a full treatment of the question of ships, see CH. BOREUX, *Études de nautique égyptienne*, *Mém. de l'Inst. Franç. d'Archéologie Orient. du Caire*, tome L, fasc. 1 and 2.

³ "The Physical Characters of the Arabs," *J. of the R. Anthropological Inst.*, XLVII, 220–224.

⁴ W. H. WARD, *Cylinders and other ancient Oriental Seals*, 115, and Nos. 269 and 270.

⁵ MOTEFINDT, *op. cit.*, 39 ff.

⁶ PETRIE, *Koptos*, 7–9, and Pls. iii–v. An interesting account is given by CAPART, *op. cit.*, 216–219.

⁷ These features are well shown in the very early sculptured vase in the British Museum, No. 118465, illustrated in *The British Museum Quarterly*, II, Part 1, Pl. v b.

⁸ C. L. WOOLLEY, *Excavations at El 'Obeid*, in *The Antiquaries Journal*, IV, 345. In Mesopotamia cockle-shells served as palettes.

Thus far we have been dealing with material forms of evidence. Of religious links I will adduce but one, primitive and essential.

The publication of M. Naville's great work on the Temple of Dêr el-Bahrî moved M. Alfred Boissier to draw a striking comparison between Hathor, so prominent in that temple, and Nin-khur-sag, goddess of Sumer¹. Both are primitive cow-goddesses: Hathor is "Queen of the Gods" (NAVILLE, *Deir el Bahari*, passim) and Nin-khur-sag "Mother of the Gods"; both are called "Lady of the Mountain," both give sacred milk to the kings of their respective lands; Nin-khur-sag is "Mother of Kings." The inlaid frieze with limestone figures found at Tell el-'Obeid in the season of 1923-4, by the Joint Expedition of the British Museum and the Museum of Pennsylvania University, in the temple of Nin-khur-sag², shows the preparation of the sacred milk for the king's use; Egypt has given us no such material scene, but many imaginative ones of Hathor, as a cow, suckling royalty.

The primitive status of these goddesses was unique; when, later, others gain ascendancy, they were either identified with the original "Mistress of All," as Ishtar with Nin-khur-sag, or the city-goddesses of Egypt with Hathor³, or they usurped their attributes, as Isis did the cow's horns of Hathor. Hathor, like Nin-khur-sag in the shape of Ishtar, became, as early as the Middle Kingdom, the Goddess of Love⁴; she is at times confused with Isis, as, for example, when she is recorded as nursing Horus in the marshes; in very late times she has even taken the place of Osiris in the formula for the dead: "O Hathor N.N."⁵

Finally, may the suggestion be hazarded that in the remote times, as yet all mist, the Semitic element in the language may have come from Mesopotamian Semites settled in South Arabia who crossed over to Somaliland and established a colony there, mixing with the Hamites of the country and eventually producing a specific culture which spread later to the Nile valley? There is, of course, no material evidence for this suggestion; enlightenment might result from exploration in South Arabia, when possible, and in Somaliland, which contains ancient ruins as yet unexplored. At least the hypothesis is compatible with the high veneration shown by the ancient Egyptians to Punt, the "Land of the Gods."

NOTE ON A MARBLE FIGURINE OF A HIPPOPOTAMUS. (See p. 243, n. 2.)

The little hippopotamus, of predynastic period, displayed in Pl. lv, figs. 4 and 5, was bought in Cairo; it is carved in blue-grey Egyptian marble, length 1 $\frac{3}{4}$ inches. It has a special technological interest as pointing to a possible origin of the theriomorphic

¹ O.L.Z., May, 1908.

² C. L. WOOLLEY, *op. cit.*, Pl. xlii. For points concerning Nin-khur-sag I am gratefully indebted to Messrs. Sidney Smith and A. C. Gadd.

³ E. WALLIS BUDGE, *The Gods of the Egyptians*, I, 431.

⁴ A. M. BLACKMAN, *The Rock Tombs of Meir*, I, 20.

⁵ SCHIAPARELLI, *Libro dei funerali*, II, 138 ff. The papyrus, now in the Louvre, recording this extraordinary variation from old tradition, is written in a peculiar form of hieratic; it is attributed to the age of the Antonines, when the ancient religion had long been confused and degraded as the result of the breakdown of the old social order and the ingress of foreign ideas. But this seeming freak may perhaps indicate that, in spite of the developments and changes undergone by the state religion in the course of thousands of years, the primitive reverence for Hathor had survived among the populace and, in the case of the lady Saïs, for whom the papyrus was written, was so strong that she would have none but the "Goddess of Heaven" to protect her in the life-after-death. The original meaning of the Osirian formula may have been very vague, or even lost, to her, as, perhaps, to many of her contemporaries.

vessels so fully discussed by Mr. S. R. K. Glanville in *Journal*, xii, 52 ff.¹ Fig. 5 shows the manner of hollowing out the ring on the animal's back; the surface within the ring is rough and unfinished, and forms a concave depression². Here, possibly, we may find an origin for theriomorphic vessels in stone, for it is but a step to continue the hollowing into the solid figure, which thus becomes a vessel. The tubular horizontal lugs would be an early addition, for purposes of suspension, and the holes in the rim, often unnecessary, especially in the larger vessels, would be suppressed.

To the claim that pottery preceded stone in this innovation it may be opposed that predynastic pottery-forms at the time now under survey were mostly founded on stone and, in the earlier period, on basketry³; that the inspiration of basketry should be followed by that of stone shows that the potters had not yet attained sufficient freedom in technique to produce independent plastic forms, nor is there in the pottery that has come down to us any intermediate stage of manufacture, such as that indicated above for stone vessels, that would suggest to the artisan the step to theriomorphic modelling—and suggestion is an important element; probably, then, the stone-carver showed the way.

¹ See several examples in Miss M. A. Murray's paper in *Historical Studies*, II, Pls. xxii and xxiii.

² This feature is found in the early theriomorphic stone vases of Susa (*Mém. de la Délégation en Perse*, vii, 18-19), which are only slightly hollowed on the back and can contain almost nothing. This is a strange detail, and we cannot see in it an accident or a mere freak; either some evolutionary process was at work, such as that described above for Egypt, or, in the absence of that—and none has yet been traced—we must suppose some foreign influence, which seems to have been Egyptian, directly or indirectly. Thus, probably, the general rule is again proved good, that a product of art originates in the country where is found its highest development, and the exception suggested for this case by Dr. Frankfort (*op. cit.*, 113) may really not exist.

³ *Prehistoric Egypt*, par. 25, and FRANKFORT, *op. cit.*, 94 and 97.

BIBLIOGRAPHY (1925-1926): GREEK INSCRIPTIONS

By MARCUS N. TOD, M.A.

The following Bibliography, which continues that published in this *Journal*, XI, 327 ff., and follows the same general lines, relates to books and articles issued in the years 1925 and 1926.

The *Sammelbuch* of F. PREISIGKE has, despite the lack of any systematic arrangement of the documents which it contains, been found so useful that the Strassburger Wissenschaftliche Gesellschaft has determined to continue its publication and F. BILABEL has edited the first half of a third volume (*Sammelbuch griechischer Urkunden aus Ägypten*, III, 1, Berlin, 1926), comprising 824 texts, of which about 350 are inscriptions and graffiti.

Attention may again be drawn to the new periodical, *Supplementum Epigraphicum Graecum*, edited by J. J. E. HONDIUS, assisted by an international committee, the purpose of which is to record all contributions to the progress of Greek epigraphical study, whether in the form of new inscriptions or in that of corrections, restorations or interpretations of documents already known: the Egyptian texts in vol. I of this collection number thirty-one, in vol. II thirty-six, several of them with improved readings or comments due to W. CRÖNERT or other scholars.

Four further works may here be mentioned, which, though they deal principally with papyri, also take account of inscriptions and ostraca found in Egypt. F. PREISIGKE's invaluable *Wörterbuch* has now (if for a moment I may overstep the chronological limit of this Bibliography) been completed: a third part of the first volume, bringing the dictionary down to the word *κωφός*, appeared in 1925 and the second volume, edited by E. KIESSLING, has been issued in three parts, published in 1925, 1926 and 1927 respectively: the author had, before his death, completed the MS. of the work as far as the word *φυλάσσω*, and the editor has been responsible for the remainder. To the merits of the book H. I. BELL has paid a high tribute in this *Journal*, x, 349. The appearance of the first half of a second volume of E. MAYSER's *Grammatik der griechischen Papyri aus der Ptolemäerzeit* (Berlin and Leipzig, 1926) is an event of no small importance: it contains the "analytic section" of the study of syntax and shows the same thoroughness and exhaustiveness which has secured for the first volume, published twenty years previously, recognition as a standard work. The long article contributed by W. CRÖNERT to the *Festschrift* presented to G. LUMBROSO (*Raccolta di scritti in onore di G. Lumbroso*, Milan, 1925, 439 ff.) is concerned with the critical restoration of papyri, but the author quotes (p. 489 ff.) a number of epigraphical examples to illustrate the language of the *προσκυνήματα* and corrects (p. 492 f.) an epitaph from El-Gabawät in the Great Oasis (*C.I.G.* 4958 = Kaibel, *Epigrammata Graeca*, 1024). M. CHAÎNE has emphasized the importance of exactitude in the dating of inscriptions and has attempted to assign to their true dates all the texts in LEFEBVRE's *Recueil des inscriptions grecques-chrétiennes d'Égypte* which are capable of chronological determination (*Journ. Soc. Or. Research*, x, 293 ff.). B. A. VAN GRONINGEN's careful study of the office and functions of the gymnasiarch in the principal cities of Roman Egypt also makes use of the limited amount of epigraphical evidence available for this subject (*Le gymnasiarque des métropoles de l'Égypte romaine*, Paris, 1924; cf. P. JOUGUET, *Rev. Ét. Anc.*, xxvii, 261 ff., J. G. MILNE, *J.R.S.*, xvi, 132).

E. BRECCIA inaugurates a new series entitled *Monuments de l'Égypte gréco-romaine*, published at Bergamo under the auspices of the Archaeological Society of Alexandria, with an abundantly illustrated volume which falls into two parts, dealing respectively with the ruins and monuments of Canopus and with Theadelphia and its temple of Pneferos: in both these sections, more especially in the second, the considerable epigraphical materials discovered on these sites are utilized and a number of texts are printed in full (see pp. 15, 51 ff., 100 ff., 126 f.)¹.

Of the famous "Rosetta Stone" H. R. HALL has given a brief and lucid account (J. A. HAMMERTON, *Wonders of the Past*, III, 1227 f.), while H. SOTTAS has reported the discovery, in the course of excavations

¹ This work is inaccessible to me and I base the above remarks on notes kindly supplied by Mr. H. I. BELL and on a review by A. CALDERINI in *Aegyptus*, vii, 325 ff.

conducted at Elephantine by the late C. CLERMONT-GANNEAU, of three fragments, among which the Greek is the most important, of a duplicate of that trilingual document (*Comptes Rendus Acad. Inscr.*, 1924, 199).

C. C. EDGAR has published two further epitaphs from Tell el-Yehûdiyah, that of a Jewess named Sabbataion and that of three children, whose names—Nardion, Teteurion and Sabbataios—illustrate the intermixture of Greek, Egyptian and Jewish influences in the life of the community (*Ann. Serv.*, xxvi, 102 ff.). A small, elliptical eucharistic table of marble, found at Tell Ebshan in the district of Tanta and published by G. LEFEBVRE (*Ann. Serv.*, xxv, 160 ff.), bears an admonition addressed to communicants. A metrical dedication by a Halicarnassian to Aphrodite-Hathor, discovered at Terenuthis (Kom Abu Billu) and assignable to the early Ptolemaic period, has been added to the Cairo Museum and published by C. C. EDGAR (*Bull. Soc. Arch. Alex.*, v, 115 f.).

In my last Bibliography I referred (*Journal*, xi, 328) to the remarkable trilingual stele unearthed in April, 1923, at Tell el-Maskhûtah, near Abu Suwêr, and taken thence to the Museum at Cairo. H. GAUTHIER and H. SOTTAS have now published this monument (*Un décret trilingue en l'honneur de Ptolémée IV*, Cairo, 1925) with text, translation and commentary: both editors have collaborated on the Greek version (p. 65 ff., Pl. ix), of which unhappily only two fragments survive, corresponding to ll. 27–31 and 39–42 of the demotic version, and have received help in their task from M. HOLLEAUX. An attempt has also been made (p. 72 f.) to restore, by aid of the Egyptian versions and other similar documents, the preamble and date of the much more seriously mutilated copy of the same decree found at Memphis in 1902. Of W. SPIEGELBERG's contribution to the study of this monument little need be said here, inasmuch as he deals primarily with the demotic version, as being the best preserved, although he prints the Greek text in footnotes (p. 10 ff.); he agrees with SOTTAS in regarding the Greek version as the basis of both the others (*Sitzungsberichte d. Bayer. Akad. d. Wissenschaften*, Philos.-philol. u. hist. Klasse, 1925, Abh. 4; cf. the summary in *Klio*, xxi, 107 f.). Elsewhere (*op. cit.*, 1926, Abh. 2) he adduces the evidence of a new papyrus from Elephantine to prove that the annual festival commemorative of Ptolemy's victory at Raphia was to be celebrated at Alexandria, while W. OTTO has investigated in detail the question of the meetings of the Egyptian priests in the Hellenistic period (*ibid.*, p. 18 ff.).

An inscribed grave-relief in the Cairo Museum has been discussed by O. RUBENSOHN (*Archäol. Anzeiger*, xxxviii–ix, 330), and the inscription on a Hadra vase in the same collection has been more correctly deciphered by C. C. EDGAR (*Bull. Soc. Arch. Alex.*, v, 116 f.).

The same scholar has also published a long and elaborate love-charm from Hawârat el-Makta in the Fayyûm, now preserved at Cairo: it is engraved upon a twice-pierced leaden tablet and is designed to secure for a certain Posidonius the full possession of Heronous, the object of his passion (*Bull. Soc. Arch. Alex.*, vi, 42 ff.). K. PREISENDANZ has emphasized the interest of this text, which reproduces a recipe from the great Paris Magical Papyrus, ll. 355–384, as showing that the magical formulae of such papyri were current in Egypt during the early centuries of our era (*Gnomon*, ii, 191 f.). A. VOGLIANO (*Boll. fil. class.*, xxxii, 17) and the present writer (*Journal*, xi, 328, note 2) have suggested some corrections in the reading of a metrical epitaph from the Fayyûm, which has been republished in *Suppl. Epigr. Graecum*, ii, 874. An interesting dedication of a gateway to Zeus, Athena and the (hitherto unknown) *πολίτευμα τῶν Κολίκων*, acquired at Medinat el-Fayyûm and now in the Institute of Papyrology of the University of Paris, has been published by H. HENNE (*Bull. Inst. Fr. Arch. Orient.*, xxv, 179 ff., 189 f.).

O. O. KRUGER has pointed out that the last word of a Christian epitaph of Mêr (LEFEBVRE, *Recueil*, 230) must be read *τραπέζιτον* rather than *νεωτέρον* (*Izvest. Ross. Akad. Istor. Mat. Kult.*, iv, 93).

F. BILABEL has called attention (*Archiv f. Papyrusforschung*, viii, 62) to the occurrence of the divine name Kolanthes in a second-century dedication from Ptolemais (*Sammelbuch*, iii, 6184) and has restored it with practical certainty in another (*Sammelbuch*, i, 3448), while S. DE RICCI has finally assigned to Ptolemais a record of a certain *Πτολεμαῖος στρατηγὸς πόλεως*, which is now at Alexandria (BRECCIA, *Iscr. gr. e lat.*, 174) and has usually been held to relate to that city (*Raccolta di scritti in onore di G. Lombroso*, Milan, 1925, 299 ff.).

N. AIMÉ-GIRON has published two interesting inscriptions from Denderah, the ancient Tentyra. One of these, found near the temple of Hathor and transferred to Cairo, is engraved on a stele bearing a relief on which the emperor Tiberius is represented worshipping Egyptian divinities: the inscription, dated August 27th, A.D. 23, records the completion of the reconstruction of the walls of the temple of Aphrodite and Isis (*Ann. Serv.*, xxvi, 109 ff.). The other, discovered in 1913 and now preserved in the Cairo Museum, is a trilingual document, dating from the eighteenth year of Augustus, in which the *στρατηγὸς* Ptolemy son of Panas, well known to us from a series of other monuments, records the grant of certain open lands

(ψιλοὶ τόποι), the position of which is carefully defined, to Isis-Thermouthis¹. The demotic version is complete, but of the hieroglyphic little remains; the Greek record has survived almost entire and shows a version independent of the two Egyptian texts (*ibid.*, 148 ff.).

Three inscriptions acquired at Luxor,—the first of which the editor interprets as the record of some association and the third as a late προσκύνημα, while the second, now at Alexandria, was erected in honour of a στρατηγός of the Theban district by an unnamed πόλις, perhaps Diospolis Magna,—have been published by H. HENNE (*Bull. Inst. Fr. Arch. Orient.*, xxv, 184 ff.). J. M. EDMONDS has provided us with new and improved readings, based upon squeezes, of the four poems in the Aeolic dialect composed by the court poetess Julia Balbilla to celebrate the visit paid by Hadrian and the Empress Sabina to Memnon in November, A.D. 130 (*Class. Rev.*, xxxix, 107 ff.).

A very notable undertaking has been brought to a successful conclusion by the issue of the third and fourth fascicules of J. BAILLET'S *Inscriptions grecques et latines des tombeaux des rois ou syringes à Thèbes* (Mémoires de l'Institut Français d'Archéologie Orientale du Caire, xlii, 3, 4, Cairo, 1925-6). In these the editor publishes the Greek graffiti, ninety-one in number, of Syringes 10, 11 and 15, and the twenty-one inscriptions reported by previous travellers which he has failed to rediscover, together with a considerable list of addenda and corrigenda, elaborate indexes and an introduction dealing with such subjects as the history of the tombs, the graffiti, chronology and calendar, single visitors and caravans, the names, homes, professions and psychology of the tourists, famous visitors, and the grammatical and paleographical peculiarities of the records. Of the second fascicule of this work (cf. *Journal*, xi, 329 f.) A. H. SAYCE has given an appreciative account (*Journal of the Royal Asiatic Society*, 1925, 721 f.), while I have suggested corrections or restorations of eleven of the graffiti which it contains (*Journal*, xi, 256 ff.).

G. ROUILLARD has republished (*Mélanges G. Schlumberger*, 85 ff.), with new restorations and a detailed commentary, two inscriptions of the sixth or seventh century A.D. engraved on the two faces of a stele from Ombos (Kom Ombo), now in the British Museum (LEFÈVRE, *Recueil*, 561, 562). She has also discussed the meaning of the term *decurio* in an inscription (*ibid.*, 584) commemorating the repair of the defences of the island of Philae in A.D. 577, which refers to the φιλανθρωπία Θεοδώρου τοῦ πανευφύμου δεκουρίωνος καὶ δουκὸς καὶ αὐγουσταλίου τῆς Θηβαίων χώρας: after examining and rejecting the interpretations put forward by LETRONNE and J. MASPERO, she concludes that the title refers to the office held by Theodorus at the Byzantine court, where the decuriones were functionaries of the same nature as, but superior to, the silentarii (*Byzantion*, ii, 141 ff.).

A. WILHELM has examined the inscription on a limestone mould in the British Museum, supposed to have come from Egypt (*Anc. Gk. Inscr. in the B.M.*, 1079), and has supported the view that the word ΣΙΚΕΑ represents a variant of δικάια, rather than Νικία (*Glotta*, xiv, 71 f.), and S. DE RICCI has sought (*Rendic. Pontif. Accad. Rom. di Arch.*, Ser. III, II, 87 ff.) to establish the Egyptian provenance of an inscription found at Pompeii (*C.I.G.*, 5866 = *I.G.*, xiv, 701 = *I.G. Rom.*, i, 458).

Turning now from Egypt to Nubia, we may note the publication by U. MONNERET DE VILLARD of a Christian epitaph from 'Anibah (*Aegyptus*, vi, 250), by F. LL. GRIFFITH of a Christian invocation, a long epitaph dated A.D. 1181, an ostrakon with a magical text, an inscribed lintel and a large number of graffiti found in the investigation of "Rivergate Church" at Faras (*Liverpool Annals*, xiii, 82 ff. and Pls. lxiii-lxv), and by H. JUNKER of a clay sealing and five tomb-inscriptions discovered at Ermenne (*Denkschriften der Akademie in Wien*, Phil.-hist. Klasse, lxvii, 1, 122, 148 ff.). The last-named scholar has also devoted a long and detailed article to the Christian epitaphs of Nubia, which, he maintains, are much more markedly distinct from those of Egypt than has been hitherto recognized and reflect the origin of the Nubian Church and its development under the various influences—Byzantine, Coptic and Nubian—which helped to mould it (*Zeitschr. ag. Spr.*, lx, 111 ff.). After a geographical survey of the available material (p. 112 ff.) and a revision of the text of certain important examples, he discusses (p. 122 ff.) the form of the stones, the formulae of the inscriptions, alike Greek and Coptic, and the special developments characteristic of certain districts, compares (p. 135 ff.) the Nubian with the Egyptian tomb-stones, estimates the influence of Byzantium and summarizes (p. 143 ff.) the results of his enquiry.

¹ The editor seems to have misunderstood a passage in the Greek text, for he translates Πτολεμαῖος Πανός ὁ στρατηγός καὶ ἐπὶ τῶν προσόδων τοῦ Τεντυρίτου by "Ptolémée, fils de Panas, le stratège, (a consacré), aux abords du temple de Dendérah" and refers to the "terrains qui étaient situés ἐπὶ τῶν προσόδων du temple." The phrase must mean "Ptolemy, son of Panas, the στρατηγός and chief revenue officer of the district of Tentura." For the simultaneous exercise by one man of the functions of στρατηγός and of ἐπὶ τῶν προσόδων cf. MITTEIS-WILCKEN, *Grundzüge*, i, 149, and the Index to *Tibutunis Papyri*, i.

W. BANNIER (*Philol. Wochenschrift*, XLVI, 540 f.) and E. HARRISON (*Class. Rev.*, XL, 140, *Cambridge Univ. Reporter*, 1925-6, p. 624) have made suggestions for the reading or interpretation of the *graffiti* of the Greek mercenaries at Abu Simbel (DITTENBERGER, *Sylloge*³, 1). Yet more interesting is the article in which G. LEFEBVRE examines the Egyptian evidence for the career of Pedisamtaoui "chief of the Hanebu," i.e. of the Greek contingents, proves that he is identical with the Ποτασιμτώ who, according to the Abu Simbel record, was in command of the foreign troops (ἀλογλώσσους δ' ἦχε Ποτασιμτώ), and so finally identifies the expedition in question as that conducted by Psammetichus II, the Psammis of Herodotus, II, 161 (*Bull. Soc. Arch. Alex.*, VI, 48 ff.).

BIBLIOGRAPHY: CHRISTIAN EGYPT (1926-1927)

BY DE LACY O'LEARY

I. BIBLICAL.

BURMESTER-DEVAUD, *Psalterii vers. Memphitica* (cf. *Journal*, XII, 306), has been reviewed by S. A. MERCER in *J. Soc. Or. Res.*, 1926, 317-25, by W. SPIEGELBERG in *O.L.Z.*, 1926, 345, by H. THOMPSON in *Journal*, XII, 140, by W. E. CRUM in *J.R.A.S.*, 1926, 734-5, by C. SCHMIDT in *Theol.L.Z.*, LI (1926), 474, by T. G. ALLEN in *Amer. Jour. of Sem. Lang. and Lit.*, 1926, 290, by U. BISSING in *Forschungen u. Fortschritte*, 1926, 79, and in *Phil. Woch.*, XLVI (1926), 932-3. The editors announce *Les Proverbes de Salomon* for this year, the text after Cod. 8 of the John Rylands Library at Manchester with variants from four MSS. of the Biblical text, and 19 liturgical MSS.: to this will be added an introduction and two photographic reproductions of the Manchester manuscript. For this year also they announce *Le Lectionnaire ou Kataméros pascal*, "nous donnerons, en outre, à part, le texte complet, avec variants, des péricopes empruntées au Kataméros de la Semaine sainte, dont la forme est entièrement distincte de celle du texte biblique": this will follow the codex Brit. Mus. Add. 5997 (of A.D. 1274). They hope to publish *Le Pentateuch*, in two vols., (i) Gen., Exod., (ii) Levit., Numb., and Deut., from Cod. Copt. 1 of the Vatican Library in 1927-8. In 1928 these are to be followed by *Les Petits Prophètes, d'après le Cod. Or. 1314 du British Mus.* (A.D. 1374), *Les Grands Prophètes*, in two vols., after Cairo MSS. in the libraries of the Jacobite and Catholic Patriarchs, and *Péricopes des livres historiques et des livres sapientiaux*, after various manuscripts.

W. TILL has prepared a new and corrected text of the Minor Prophets in Akhmimic. The text is already printed and the book will be published, in all probability, before this bibliography appears.

H. A. SANDERS, *An early papyrus fragment of the Gospel of Matthew in the Michigan collection*, in *Harvard Theol. Rev.*, XIX (1926), 215-26, gives Matth. xxvi. 19-52, from Gk. Pap. 1570 of the University of Michigan, of date 200-350 (?).

H. A. SANDERS, *Papyrus fragment of Acts in the Michigan collection* (1927), 19, gives a fragment which shows Acts xviii. 27-xix. 8, and on the reverse xix. 12-16. The editor suggests that the document belongs to the middle of the 3rd cent.

N. REICH, *Gospel of St. John in Coptic*, in *Amer. Jour. Sem. Lang.*, 1926, 211, is an account of H. THOMPSON, *Gospel of St. John* (cf. *Journal*, XI, 320). Sir Herbert THOMPSON's edition has been reviewed by S. A. MERCER in the *J. Soc. Or. Res.*, x (1926), 108-10.

H. G. EVELYN WHITE, *Monasteries of the Wādī 'n-Natṛān*, I (cf. sect. VIII below), contains (no. xxxviii = pp. 195-9) a description of various Biblical fragments, including Exod. xxxiv. 29-35, xxxv. 1-10, xxxix. 30 sqq., xxxvi. 8 sqq., xxxv. 38, xxxviii. 9-18, numerous fragments of the Psalter, six nearly complete folios of the gospels, with a number of fragments, five leaves of the epistles (chiefly Romans), and two leaves of a catena. The editor gives a list of variants from accessible printed texts.

W. WILLCOX, *The Four Gospels in Egyptian. Introduction, St. Matthew, St. Mark*, is announced as issued by the Nile Mission Press, Cairo (1925), and has been noticed in *Ch. Q. Rev.*, c (1925), 366-8. I have not seen a copy, but no doubt it is in the excellent type now used by that press.

II. APOCRYPHAL, Gnostic, ETC.

(a) *Apocrypha.*

H. G. EVELYN WHITE, *Monasteries of the Wādī 'n-Natṛān*, I (see sect. VIII below), contains several apocryphal pieces, including a fragment on Adam (i, 3-6), apocryphal acts and martyrdoms of the apostles (vi-vii, 27-51), and texts relating to the Virgin (viii, 31-65).

H. P. BLOK, *Die koptischen Abgarbriefe des Leidener Museums*, in *Acta Orientalia*, Leiden (1927), 238-51, discusses the text already published by W. PLEYTE and P. A. A. BOESER, *Manuscripts coptes*, Leiden (1897).

C. SCHMIDT, *Studien zu den alten Petrusakten*, II. *Die Komposition*, in *Z. für Kirchengeschichte*, 1926, 481-513, deals with the materials and structure of the Greek and Latin apocryphal acts of Peter, but as these figure prominently in Coptic literature their inclusion here seems justified.

(b) *Logia*.

E. RIGGENBACH, *Das Wort Jesu im Gespräch mit dem pharisäischen Hohenpriester nach dem Oxyrhynchus Fragment V*, no. 840, in *Z. Neut. Wiss.*, 1926, 140-1, contains philological observations, notes on parallels in the canonical gospels, etc.

E. BURROWS, *Note on Oxy. Logion (1907) V*, appears in *J.T.S.*, xxviii (1927), 186.

(c) *Gnosticism*.

F. MITZKA, *Gnosticismus und Gnadenlehre*, in *Z. f. Kath. Theol.*, 1927, 60-4, is a brief essay.

P. ALFARIC, *Gnostiques et Gnosticisme*, has appeared in *Rev. de l'hist. des relig.*, 1926, 108-15.

E. DE FAYE, *Gnostiques et Gnosticisme* (cf. *Journal*, ix, 227), has been reviewed by P. MONCEAUX in *J. Sav.*, N.S., xxiv (1926), 38, by F. LOOFS in *Theol.L.Z.*, LI (1926), 361-8, an exceptionally full criticism of the book, and by A. D. NOCK in *Journal*, xii, 316.

C. SCHMIDT, *Pistis Sophia* (cf. *Journal*, xi, 321), has been reviewed by H. GROSSMANN in *Theol. Blätter*, 1925, 7, by B. S. EASTON in *J. Soc. Or. Res.*, x (1926), 228-9, and by B. VIOLET in *Theol.L.Z.*, LII (1927), 1.

K. E. TRISTAN, *Die Gnostiker oder die unsichtbare Kirche*, Bad Schmiedberg (1925), viii + 179, figs., 1 pl., is announced, but I have been unable to see a copy.

P. HENDRIX, *De alexandrijnsche Hueresiarch Basilides. Eene Bijdrage Tot de geschiedenis der Gnosis*, Dordrecht (1926), xiii + 126, is a thesis presented in the Univ. of Leiden. It has been reviewed by J. COPPENS in *R.H.E.*, xxiii (1927), 73-5, who says that "son travail est peu original...il brouille de nouveau les traits des diverses écoles gnostiques que M. de Faye avait réussi à grand'peine à distinguer," though "quelques articles sont riches de promesses."

L. CERFAUX, *La gnose sinonienne. Nos principales sources*, appears in *R. sci. relig.*, xv (1925), 489-511, and xvi (1926), 5-20, and is continued as *Culte et doctrine* in *ib.* 265-85. It is to be continued further.

(d) *Manicheism*.

E. WALDSCHMIDT und W. LENTZ, *Die Stellung Jesu im Manichäismus*, Berlin (1926), 131, 4 plates, is fasc. 4 of *Abhandl. Preuss. Akad.*, Phil.-Hist. Klasse. S. A. COOK, *Religion of the Manichees*, is published in *J.T.S.*, xxvi (1925), 382-90.

III. LITURGICAL.

(a) *Euchologion*.

G. GRAF, *Liturgische Anweisungen des koptischen Patriarchen Kyrillos ibn Lablak aus dem Arabischen übersetzt*, in *Jahrb. für Liturgiewissen.*, v (1925), 119-39, deals with the liturgical use of the Patriarch Cyril (A.D. 1235-42) as given in Vat. Cod. Arab. 117.

A. RUCKER, *Orientalische Liturgie seit dem 4. Jahrhundert*, in *Jhb. f. Liturg.*, v (1925), 371-82, treats in a general way various liturgies, the church calendars, hymnology, and church music.

The same writer's *Denkmäler altarmenischer Messliturgie*, 4. *Die Anaphora des Patriarchen Kyrillos von Alexandria*, in *Oriens Chr.*, xxiii (1926), 143-57, has an indirect bearing on the Egyptian liturgy.

H. G. EVELYN WHITE, *Monasteries*, etc. (see below, sect. VIII), contains (xxxviii, A: 200-13) portions of the Greek liturgies of S. Basil and S. Gregory which supply the Greek text of several passages hitherto known only in the Coptic version;—(xxxviii: 213) briefly describes fragments of the Coptic Anaphora of S. Basil;—(xxxviii, C: 213) describes the fragments of a Coptic ordinal.

S. EURINGER, *Die Anaphora der 318 Rechtgläubigen äthiopisch u. deutsch*, after the MS. Berlin 414, appears in *Z. für Semitistik*, 1925-6, 61-2, and, like all Ethiopic liturgy, has direct bearing on the liturgies of the Coptic Church.

H. FUCHS, *Die Anaphora des monophysitischen Patriarchen Johannän I*, in *Zusammenhang d. gesammten jakobitischen Anaphorenliteratur untersucht*, Münster (1926), LXXXII, 65, is a contribution to the study of the Jacobite liturgy.

S. EURINGER, *Die äthiopische Anaphora des heil. Epiphanius, Bischofs der Insel Cypern*, in *Oriens Chr.*, xxiii (1926), 98-142, also has a bearing, though indirect.

(b) *Horologion*.

H. G. EVELYN WHITE, *Monasteries*, etc. (cf. sect. VIII below), contains short descriptions of fragmentary Horologia (xxxviii, D: 214), and of a Pascha or hours for Holy Week (xxxviii, E: 214-15).

(c) *Theotokia, Difnâr, and other hymns.*

H. G. EVELYN WHITE, *Monasteries*, etc. (sect. VIII below), gives brief descriptions of a Difnâr (xxxviii, F), a book of hymns (*ib.* G), and a Psalter (*ib.* H—all pp. 215-16): it also contains the full text of an acrostic hymn on the Nativity (ii: 7-9) obviously from a Difnâr, as well as odes on S. Macarius (xxiii, A, C, D: 120-4, 127-35), on the saints of Scetis (xxiv: 135-41), and other hymns (Suppl. B, C: 226-8), all of which appear to belong to the Difnâr.

W. H. P. HATCH, *Three Coptic Fragments from Nitria*, in *Annual of Amer. Schools of Or. Res. for 1924-5* (1926), 108-11, gives fragments which were found by the editor at the Dêr Abû Makâr in 1923. Of these the second and third are Theotokia fragments.

H. LECLERCQ, *Hymnes*, in *Dict. d'arch. chrét.*, VI, 2 (1925), 2826-928, devotes several columns (2893-97) to Coptic hymns.

D. O'LEARY, *Theotokia* (cf. *Journal*, IX, 227), has been reviewed by A. MALLON in *Biblica*, VII (1926), 339-41: the same editor's *Fragmentary Coptic Hymns* (cf. *Journal*, X, 325) is reviewed by P. P(ETERS) in *Anal. Boll.*, XLIII (1926), 165-6, and his *Coptic Difnâr* (cf. *Journal*, XII, 307) by P. P(ETERS) in *Anal. Boll.*, XLIV (1927), 156-8, by W. E. CRUM in *J.R.A.S.*, 1926, 736-7, by S. GASELEE in *Bull. Sch. Or. Stud.*, Lond., 1926, 406-8, and by S. A. B. MERCER in *J. Soc. Or. Res.*, X (1926), 317.

S. GREBAUT, *Le Synaxaire Éthiopien, IV. Mois de Tschasch et Yakali*, which continues the Ethiopic Synaxarium from Patr. Orient. IX, fasc. 4, and will form a 5th fasc. of P.O. XV, is now in the press and will appear shortly. The Ethiopic Synaxarium has, of course, a very close relation to that of the Coptic Church.

O. URSPRUNG, *Der Hymnus aus Oxyrhynchos (Ende des 1. Jahrh. ägyptischer Papyrusfund) im Rahmen unserer kirchenmusikalischen Frühzeit*, in *Theol. u. Glaube*, XVIII (1926), 397-419, is a further study on the hymn fragment in P. Oxy. 1786 (cf. *Journal*, IX, 227), and so is H. ALBERT, *Das älteste Denkmal der christlichen Kirchenmusik*, in *Die Antike*, II (1926), 282-90, dealing especially with the old Greek character of the music.

IV. CHURCH LITERATURE AND THEOLOGY.

(a) *Patres Apostolici.*

H. DUENSING, *Epistula Apostolorum nach dem athiop. u. koptischen Texte* (cf. *Journal*, XII, 307), is reviewed by M. J. D. in *Mé. Univ. S. Joseph*, X (1925), 232-6, by S. A. B. MERCER in *J. Soc. Or. Res.*, X (1926), 325, and by C. SCHMIDT in *Theol. L.Z.*, LI (1926), 474-5.

K. BIHLMAYER, *Die Apostolischen Väter* (cf. *Journal*, XII, 308), has been reviewed by E. KLOSTEMANN in *O.L.Z.*, XXX (1926), 501. O. CLEMEN, *Apostolische Väter*, Frankfurt (1925), 32, has been reviewed by W. E. in *Hist. Z.*, CXXXII (1925), 351. KIRSOPP LAKE, *Shepherd of Hermas*, appears in *Harvard Theol. Rev.*, XVIII (1925), 279-80. A. NEPPI-MODONA, *Nuovo contributo dei papiri per la conoscenza degli antichi cristiani*, appears in *Bulchais*, 1926, 161-74.

(b) *Later Patristic Writers.*

W. H. P. HATCH, *Fragment of a lost work on Dioscorus*, in *Harvard Theol. Rev.*, XIX (1926), 377-81, gives a fragment, probably of the 14th cent., procured by the writer from the Dêr Abû Makâr in 1923. This fragment is also published and discussed, by the same writer, as the first of *Three Coptic Fragments from Nitria*, in the *Ann. of Amer. Sch. of Or. Res.*, 1926, 108-11.

W. BANNIER, *Ein Papyrusfragment aus d. Chronik des Hippolytus*, appeared in *Philologus*, LXXXI, 1925, 123-7, and dealt with P. Oxy. VI, 870.

A. D'ALÈS, *Les correspondants de l'abbé Paphnûg*, in *Rev. des quest. hist.*, CIII (1925), 110-18, gives a French translation, with commentary, of the correspondence published in H. I. BELL, *Jews and Christians* (cf. *Journal*, X, 327).

H. G. EVELYN WHITE, *The Monasteries*, etc. (cf. sect. VIII below), gives (n. xxxv: 178-91) six homiletic fragments of which one is ascribed to Severian of Gabala, another to Gregory Theologus, and seven fragments of monastic or ascetic precepts (xxxvi: 192-4).

J. ZELLINGER, *Studien zu Severian von Gabala*, Münster (1926), viii + 182, contains (3) an Ethiopic homily, and (4) Syriac, Arabic, and Coptic homilies. A full note on the contents of this work is given by C. W. in *Byz. Zeit.*, 1927, 443-4.

M. JUGIE, *Homélies Mariales Byzantines*, P.O. XIX, fasc. 3, Paris (1927), 289-526, is continued from P.O. XVI (cf. *Journal*, X, 326), the former volume being reviewed by A. E. in *Byz. Zeit.*, 1926, 170-1,

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and by A. D'ALÈS in *Études*, Paris (1927), 357. Though not directly connected with Coptic literature, these homilies illustrate the Coptic Theotokia.

Th. LEFORT, *La règle de S. Pachôme (nouveaux documents)*, in *Muséon*, XL (1927), 31-64, deals with material in Paris B.N. Copte 129/12 (4-6), Musée du vieux Caire 390, Mus. Ég. du Caire 9256, and gives parallels from S. Jerome and from the Greek of Jerusalem Cod. Sab. 662, etc. W. BOUSSET, *Apophthegmata* (cf. *Journal*, x, 326), is reviewed by R. MELCHER in *Theol. Rev.*, XXV (1925), 447-9.

(c) *Ethiopic Literature.*

J. M. HARDEN, *Introd. to Ethiopic Christian Lit.* (cf. *Journal*, XII, 308), is reviewed by P. P(EETERS) in *An. Boll.*, XLIII (1926), 398.

(d) *Theology.*

M. JUGIE, *Theologia dogmatica christianorum orientalium ab Ecclesia Catholica dissidentium*, I, Paris (1926), 727, is entirely occupied with the theology of the Greek-Russian Church and will be followed by a second volume of the same character. A third volume will deal with the Monophysite bodies. This first volume has been reviewed by R. DRAGUET in *R.H.E.*, XXIII (1927), 93-8, and by V. GRUMEL in *Échos d'Orient*, XXX (1927), 122-3.

V. HISTORY.

(a) *General.*

M. CHAÎNE, *Chronologie* (cf. *Journal*, XII, 308), has been reviewed by S. A. MERCER in *J. Soc. Or. Res.*, x (1926), 315-16, by V. GRUMEL in *Échos d'Orient*, XXIX (1926), 116-18, and by P. P(EETERS) in *An. Boll.*, XLIII (1926), 144-7. M. CHAÎNE, *La chronologie de quelques inscr. grecques-chrétiennes d'Égypte*, appears in *J. Soc. Or. Res.*, x (1926), 293-9.

R. JANIN, *Les églises orientales et les rites orientaux*, Paris (1927), xii + 655, 58 illust., 8 maps, is a second edition of this work. It has been reviewed by L. JALABERT in *Études*, Paris (1927), 358. The same writer's *De hodierna statu ecclesiarum et rituum orientalium* appears in *Bogoslovni Vertnik*, Ljubljana (1927), 42-54, and his *Chronique des églises orientales* in *Échos d'Orient*, XXX (1927), 107, etc., the first part (107-10) dealing with the Greek patriarchate of Alexandria. A. FORTESCUE, *Uniate Eastern Churches* (cf. *Journal*, XI, 323), has been reviewed by J. SIMON in *An. Boll.*, XLIII (1926), 135-9. N. H. BAYNES, *Alexandria and Constantinople, a study in ecclesiastical diplomacy*, appeared in *Journal*, XII, 145-56.

H. I. BELL, *Jews and Christians* (cf. *Journal*, x, 327), has been reviewed by E. BRECCIA in *Bull. de la Soc. archéol. d'Alex.*, 1925, 117-30. A German version has appeared as BELL, *Juden und Griechen im römischen Alexandria*, Leipzig (1926), 52, 2 figs., and has been reviewed by A. CALDERINI in *Aegyptus*, VII (1926), 336-7. It is reviewed also by W. OTTO in *Phil. Woch.*, XLVI (1926), 6-15.

P. JERNSTEDT, *Zu den koptischen Briefen an den Meletianer Païëu*, in *Comptes rend. de l'acad. des sci. de l'U.R.S.S.*, Leningrad, 1927, 65-8, is a critical note on the Coptic letter on pp. 91 sqq. of BELL's *Jews and Christians*.

H. I. BELL, *The episcopalis audientia* (cf. *Journal*, XI, 324), has been reviewed by U. WILCKEN in *Archiv*, VIII (1926), 101.

W. ENSLIN, *Ein Prozessvergleich unter Kleriken vom Jahre 481*, in *Rhein. Museum*, LXXV (1926), 422-46, gives an interesting account of a law suit between clerics of the diocese of Siut in 481, with text from Pap. Princeton 55.

A. KALSBACH, *Die altkirchliche Einrichtung der Diakonissinnen bis zu ihrem Erlöschen*, Freiburg i. B. (1926), 112, devotes several pages (32-46) to the history of deaconesses in Egypt and deals incidentally with problems raised in the Didascalia.

G. BARDY, *La vie chrétienne aux IIIe et IVe siècles d'après les papyrus*, appears in *Rev. apologét.*, XLII (1926), 643-51, 707-21.

L. DUCHESNE, *L'Église au VIe siècle*, Paris (1925), viii + 663, deals incidentally with the missions to the S.E. (Arabia, Nubia, etc.) and the rise of the Monophysite Church. As the preface announces, the contents have been carefully revised by H. QUENTIN. It is reviewed by P. P(EETERS) in *An. Boll.*, XLIII (1926), 406-7.

A. D'ALÈS, *Apollinaire. Les origines du monophysitisme*, in *Rev. apologétique*, XLII (1926), 131-49, gives a brief account of the rise of the Jacobite churches.

J. MASPERO, *Hist. des patriarches d'Alexandrie* (cf. *Journal*, x, 327), is reviewed by J. LEBON in *R.H.E.*, XXII (1926), 592-4.

H. LECLERCQ, *Invasion arabe*, in *Dict. d'arch. chrét.*, VII, 1 (1926), 1919-52, is largely concerned with the Muslim invasion of Egypt.

D. GORCE, *Les voyages, l'hospitalité, et les belles-lettres dans le monde chrétien des 4e et 5e siècles*, Paris (1925), x+294, is supplementary to his *Lectio Divina* (see below): it has been reviewed by A. D'ALÈS in *Études*, CLXXXIX (1926), 75-9, and by the same writer in *Rech. de sci. relig.*, XVII (1927), 70-1.

J. STIGLMAYR, *Pseudo-Makarius und die Afermyistik der Messulianer*, appears in *Z. f. kath. Theol.*, XLIX (1925), 244-60. In G. L. MARRIOTT, *The Messulians and the discovery of their ascetic book*, in *Harvard Theol. Rev.*, XIX (1926), 191-8, the author returns to a subject in which he has already done good work. Both these work on the lines now well established by the labours of VILLECOURT and WILMART (cf. *Journal*, VIII, 179).

Ch. BEAUGÉ, *Un réformateur copte au XII^e siècle*, in *R. des quest. hist.*, CV (1927), 5-34, deals with the same subject as G. GRAF's *Reformversuch* (cf. *Journal*, x, 328), and gives an account of the schism started by Markus ibn al-Qanbar which the writer treats as a nationalist movement. Nothing material has been added to GRAF's work. GRAF's book is reviewed by P. PEETERS in *An. Boll.*, XLIII (1925), 439-40.

A. KAMMERER, *Essai* (cf. *Journal*, XII, 308), dealing with the history of the daughter church of Abyssinia, is reviewed by P. PEETERS in *An. Boll.*, XLIII (1926), 399-400. Other recent works on Abyssinia are L. D'ARCE, *L'Abyssinie, Étude d'actualité 1922-4*, Avignon (1925), which is reviewed by L. JALABERT in *Études*, CLXXXV (1925), 251, and P. ALYPE, *L'empire des Négus, de la reine de Saba à la Société des Nations*, Paris (1925), xiv+312, illust. map, also reviewed by L. JALABERT in the course of the same article.

(b) *Monasticism.*

H. BREMOND, *Les Pères du Désert*, Paris (1927), lix+318 (one vol. in two, continuous pagination), is a description of Egyptian monastic life which is chiefly distinguished by its attractive literary form. A popular summary appears in C. DE CHANTEMERLE, *Voir du désert*, in *Rev. apologét.*, XLIII (1927), 252-531.

D. GORCE, *La lectio divina, des origines du cénobitisme à saint Benoît et Cassiodore. I. Saint Jérôme et la lecture sacrée dans le milieu ascétique romain*, Paris (1925), xxxvi+398, is reviewed by A. D'ALÈS with the same writer's *Les voyages* (see above). These two works were theses offered for the doctorate in literature at Paris and make only passing reference to the Egyptian monastic fathers.

Th. LEFORT, *S. Pachôme et Amen-en-ope*, in *Muséon*, XL (1927), 65-74, touches lightly upon the possible continuity between the literature of ancient Egypt and that of Christian times. The evidence given in this essay is not very convincing.

H. WIESMANN, *Zu zwei Schenute-Stellen*, appears in *Z.A.S.*, LXII (1926), 67.

F. v. WOESZ, *Ἀσουλία*, appears in *Z. der Savigny-Stift.*, XLVI (1926), 32-64. The same writer's *Das Asylwesen* (cf. *Journal*, XI, 323) is reviewed by VAN MEURS in *Tijdschrift voor Rechtsgeschiedenis*, Leiden, 1925, 347-53.

(c) *Hagiography and Biography.*

G. BARDY, *Clément d'Alexandrie*, Paris (1926), 319, is one of a series dealing with ascetic and moral theology: it is principally concerned with Clement's moral teaching. F. PRAT, *Projets littéraires de Clément d'Alexandrie*, appears in *Estudis Franciscans*, Sarria, XXXVI (1925), 144-60, and the same writer, using the same title, also contributes to the *Rech. sci. relig.*, xv (1925), 234-57.

F. ANDRES, *Die Engel- und Dämonenlehre des Klemens von Alexandrien*, appears in *Römische Quartalschr.*, XLIII (1926), 13-27, 129-40, and 307-29.

H. DELEHAYE, *Les recueils antiques* (cf. *Journal*, XI, 324 and XII, 309), has been reviewed by A. E. in *Byz. Zeit.*, XXVI (1926), 178-9. H. DELEHAYE, *Sanctus. Essai sur le culte des saints dans l'antiquité*, Brussels (1927), viii+265, though not primarily concerned with the usage of the Coptic Church, contains material which has important bearing upon Egyptian hagiography.

F. CAVALLERA, *Paul de Thèbes et Paul d'Oryrhynque*, appears in *Rev. d'ascet. et de mystique*, VII (1926), 302-5.

H. DELEHAYE, *Une vie inédite de saint Jean P.Aumônier*, in *An. Boll.*, XLV (1927), 5-74, gives a new text of the life of this seventh century patriarch of Alexandria from the MS. Graec. 349 of the 11-12th cent. in the library of S. Mark's, Venice, which differs from the text of H. GELZER (1893). The editor regards this new text as a combination of the biographies by Leontius of Neapolis and Sophronius.

P. PEETERS, *La passion arabe de S. 'Abd al-Masih*, in *An. Boll.*, XLIV (1926), 270-341, deals with an Arabic translation from the Syriac, but one which shows marked resemblances to Egyptian passions (cf. p. 273).

†H. G. EVELYN WHITE, *The Monasteries*, etc. (sect. VIII below), gives several encomia upon saints (ix–xiii: 66–73), not of any historical importance, a group of texts relating to Saint Macarius (xxiii: 120–35), a series of martyrdoms (xiv–xxii: 75–120, and suppl. text A, 225), and more or less fragmentary lives of Abba Apollo Theodore the disciple of S. Pakhom, Ephraem Syrus, Abba Pidjimi, Shenouti, Apa Hor, etc. (xxv–xxxiii: 141–75). These latter, including the accounts of local saints, are naturally of considerable interest.

Th. LEFORT, *S. Pachomii Vita* (cf. *Journal*, XII, 309), has been reviewed by P. P(ETERS) in *An. Boll.*, XLV (1927), 154–6.

Dom V. BAUDOT, *Dictionnaire d'hagiographie*, Paris (1925), 662, makes some use of Coptic as well as other oriental material. It has been reviewed by A. ALLGEIER in *O.L.Z.*, 1927, 374, by E. DE MOREAU in *La rev. bibliogr.*, Brussels, VII (1926), 5–6, and by J. SIMON in *An. Boll.*, XLIV (1926), 383–4, who points out that insufficient use has been made of recent research, “beaucoup de notices ne sont pas même accompagnées de références” (384).

F. G. HOLWECK, *Biographical Dictionary of the Saints*, St. Louis (1924), xxix+1053. Here again the results are hardly in line with present knowledge. It is reviewed by J. SIMON in *An. Boll.*, XLIV (1926), 381–3, who remarks that “le choix des sources, avant tout, devrait être plus sévère.”

VI. NON-LITERARY TEXTS.

W. E. CRUM and H. G. EVELYN WHITE, *Monastery of Epiphanius at Thebes*, Part II (1926), xvi+386, 17 plates (cf. sect. VIII below), gives Coptic ostraca and papyri (texts 3–117, trs. 155–298), Greek texts (119–39, 299–325), Coptic graffiti (141–3, 326–8), Greek graffiti (144–7, 329–30), texts (fresco) from tomb at Daga, both Coptic (148–52, 331–41) and Syriac (152, 342), whilst Appendix III reproduces a will relating to this monastery.

H. I. BELL and W. E. CRUM, *Greek-Coptic Glossary* (cf. *Journal*, XII, 310), has been reviewed by W. CRONERT in *Gnomon*, II (1926), 654–6, and more briefly noticed by F. Z. in *Byz. Zeit.*, XXVI (1926), 162–3.

S. EITREM, *Papyri Osloenses*, fasc. 1. *Magical Papyri*, Oslo (1925), iii+151, 13 plates, has been reviewed by L. DEUBNER in *Gnomon*, II (1926), 406–12, by A. BOULANGER in *Rev. de l'hist. de relig.*, 1926, 321–2, by M. GASTER in *J.R.A.S.*, 1927, 400–2, by E. PETERSON in *T.L.Z.*, 1926, 508–10, and briefly noted by F. Z. in *Byz. Zeit.*, XXVI (1926), 160.

GHEDINI, *Lettere cristiane* (cf. *Journal*, x, 232), has been reviewed by R. MOUTERDE in *Mél. Univ. S. Joseph*, x (1925), 236–7, and WORRELL, *Coptic MSS. in the Freer Coll.* (cf. *Journal*, x, 329), is reviewed by F. Z. in *Byz. Zeit.*, XXVI (1926), 176–7.

H. LECLERCQ, *Inventaires liturgiques*, in *Dict. d'arch. chrét.*, VII, 1 (1926), 1396–1418, deals (1410–16) with Coptic inventories, viz. (vii) *Inv. d'Ashmunain*, giving text from Rylands MS., (viii) *Inv. d'une église égyptienne* (cf. CRUM, *Cat. Coptic MSS. in J. Rylands Libr.*, 117–19), and Coptic material is used in (v) *Inv. de l'église d'Ibion* (1405–7).

Dom A. KROPP is preparing a selection of Coptic magical texts which will be ready for publication in the near future.

Dom VANLANDTSCHUTT has made a very valuable collection of colophons of Coptic manuscripts, in Sa'idic, Bohairic, and Arabic, and is now preparing a manual dealing with this subject.

VII. PHILOLOGY.

A. MALLOX, *Grammaire copte*, Beyrouth (1926), xviii+192, is the third edition of this well-known manual. There are a few minor alterations and corrections, but this edition is substantially a reprint of the familiar book.

H. P. BLOK, *Die griechischen Lehnwörter im Koptischen*, in *Z.Ä.S.*, LXII (1926), 49–60, contains some interesting notes on phonetic changes which have taken place in words borrowed from the Greek.

H. G. EVELYN WHITE, *Monasteries*, etc., I (see below, sect. VIII), contains a description (222) of fifty-two leaves of Coptic-Arabic vocabularies found in the Dêr Abû Makâr, and Appendix I, by Dr. G. SOBHY (231–69), gives portions of an Arabic MS. in Coptic script, portion of the same document as Camb. Univ. Libr., Add. 1896.17, which was obtained by TISCHENDORF from the Wadî 'n-Natrûn, and to this text Dr. SOBHY adds notes on Coptic and Egyptian Arabic phonology. G. SOBHY, *The transliteration of the ancient Egyptian names of towns, villages, etc. into Arabic*, in *Compt. Rend. du Congr. Internat. de Géogr.*, Cairo (1925), 115–25 reprinted Cairo (1926), contains further notes on phonetic changes. The examples tend to

show that in Arabic "these names of towns were not pronounced according to rules at all. It was entirely a question of usage and hearing."

E. DEVAUD, *Coptica*, in *Z.Ä.S.*, LXII (1926), 109-11, gives two short articles, (i) sur la substitution de Ⲅ à Ⲁ en boharique, and (ii) sur les mots coptes ⲟⲩⲓ (B) et ⲡⲟⲩⲁ (S.A.F.B.) et leurs correspondants égyptiens.

A series of philological notes by W. SPIEGELBERG appears in the *Z.Ä.S.*, LXII (1926): 44, ⲗⲁⲑⲙⲉ "Bachtrog" und ⲗⲁⲕⲙⲉ "Bissen, Brocken": 44-5, Das weibliche Qualitativ ⲟⲩⲓⲧ "gemacht": 45-6, ⲕⲉⲟⲩⲓ "Schuler": 46-7, Das ägyptische Prototyp von ⲑⲱⲗ: ⲕⲱⲗ "weise sein": 47, ⲑⲓⲡⲡⲉⲕ = ⲓⲡⲡⲉⲩⲥ: 47-8, Der mutmassliche mundartliche Unterschied der koptischen ⲁⲕⲕⲁ und ⲁⲡⲁ: 48, ⲡⲓⲧⲁⲕ ⲥⲉ (A) "er ist es": 48-9, *ⲑⲓⲡⲉ: *ⲑⲓⲡⲓ "bewegen, bewegen" (?).

H. WIESMANN has contributed to the *Z.Ä.S.*, LXII (1926): 66, ⲙⲡⲧⲁⲕ ⲉⲥⲱⲧⲙ "er kann nicht hören": 67, ⲱⲁ- "Pries, Wert?", in which he endeavours to maintain this meaning as against W. E. CRUM in *Journal*, VIII, 187: 67-8, Fortsetzung eines Relativsatzes durch eine Hauptsatz- bzw. Demonstrativsatzkonstruktion im Koptischen: and 68, ⲫⲓⲙⲉⲧⲁⲡⲟⲓⲁ.

Studies in Coptic etymology also appear in E. ZYHLARZ, *Koptische Etymologien*, in *Wiener Z. f. d. Kunde d. Morgenlandes*, 1925, 169-78, dealing with B. ⲕⲱⲧⲥ "bekämpfen" und ⲕⲉⲧⲥ "Krieg": zur Erklärung von ⲗⲁⲥⲙⲁⲧⲡⲟⲩⲧ: B. ⲕⲉⲙⲧⲁⲧ "wahr sagen": zur Grundbedeutung von ⲗⲁⲁⲧ und ⲑⲁⲓ: ⲑⲗⲉⲓ "jemand, etwas: nichts" and ⲕⲓⲱⲧⲙ: ⲥⲓⲱⲧⲙ "wahr sagen."

An important note on the Coptic absolute pronoun appears in W. TILL, *Die Ueberreste des altägyptischen unbetonten (alteren) Pronomen absolutum im Koptischen*, in *Wien. Z. f. d. Kunde des Morgenl.*, 1926, 125-30.

W. TILL, *Achmîmische Berichtigungen und Ergänzungen zu Spiegelbergs Koptischen Handwörterbuch*, in *Z.Ä.S.*, LXIII (1927), 115-30, gives additions and corrections to SPIEGELBERG's Dictionary (1921).

W. SPIEGELBERG, *demire* (دميرة) "Überschwemmung" (=kopt. ⲉⲙⲡⲉ mit Artikel), appears in *Z. f. Semistik*, 1925-6, 61-2.

STEINDORFF, *Kurzer Abriss* (cf. *Journal*, VIII, 184), has been reviewed by J. SCHLEIFER in *Gott. Gel. Anz.*, CLXXXI (1925), 4-6.

P. JERNSTEDT, *Die grammatische und lexikalische Stellung des koptischen Verbums ⲡⲁ "gehen," in Comptes-Rend. de l'Acad. des Sciences de l'U.R.S.S.*, 1927, 33-5, is based on an examination of no. 39 of SPIEGELBERG's "Kopt. Etymologien," and the same writer's *Das koptische Praesens und die Anknüpfungsarten des näheren Objekts*, ib. 69-74, on SPIEGELBERG's "Kopt. Miscellen," no. 36.

W. TILL has made arrangements with Messrs. Hinrichs for the publication of his Akhmîmic grammar, which may be expected shortly.

†H. SOTTAS, *Les mesures itinéraires ptolémaïques et le papyrus démotique 1289 de Heidelberg*, in *Aegyptus*, VII (1926), 237-42, defines the Coptic terms ⲱⲉⲡⲡⲟⲑ, ⲥⲧⲁⲗⲓⲟⲩ, ⲱⲑⲱ, ⲡⲕⲓⲙⲉ.

K. SETHE, *Zur Wiedergabe des ägyptischen h am Wortanfang durch d. Griechen*, in *Nach. d. Gesellsch. der Wissen. zu Göttingen*, Phil.-Hist. Kl., 1925, 50-6, deals with the transmission of the h sound as affected by passage through the Greek and shows the regular loss of initial h in Boh., e.g. Arab. *hucgal* = ⲁⲩⲕⲁⲗ, Ar. *ḥalak* = ⲁⲗⲁⲕ.

K. SETHE, "Der Mensch denkt, Gott lenkt" bei den alten Ägyptern, in *Nach. Gesell. Wissen. Göttingen*, Phil.-Hist. Kl., 1925, 141-7, deals with the transmission of this proverbial expression and in sect. 2 (144-5) treats the etymology of Coptic ⲟⲩⲉⲧ- and the expression of difference as in "one...the other..."

W. F. ALBRIGHT, *Another case of Egyptian ā = Coptic ē*, in *Z.Ä.S.*, LXII (1927), 64-6, in which the writer argues that Eg. *kūr* = Heb. *kinnor* = Copt. ⲥⲓⲡⲡⲉ "harp."

VIII. ARCHAEOLOGY.

(a) Exploration.

Several works of exceptional importance have appeared during the past year. Amongst these is W. E. CRUM, H. E. WINLOCK, and †H. G. EVELYN WHITE, *The Monastery of Epiphanius at Thebes*, two parts, N.Y. (1926), I, xxvi+278, 35 plates, 51 figs. in text: II, xvi+386, 17 plates. In Part I, H. E. WINLOCK gives an account of the expedition to Thebes, the topography of the monastery, the excavations, and of the carpentry, agricultural instruments, textiles, leather work, etc., found there (i-xxi, 1-97): W. E. CRUM describes the literary material, the history of the monastery, the writing materials, etc., and gives an account of Epiphanius and Pesunthius (98-256). In Part II are the texts, the Coptic edited by W. E. CRUM, the Greek by H. G. EVELYN WHITE; to these reference has been made in sect. VI above.

The work has been reviewed by H. HYVERNAT in *Amer. Hist. Review*, 1927, 565-8, by Th. LEFORT in *Muséon*, XL (1927), 153-4, by A. BOAK and W. H. WORRELL in *J. Amer. Or. Soc.*, XLVII (1927), 85-7, and cursorily in the *Times Lit. Suppl.* for Jan. 27, 1927, 53.

H. G. EVELYN WHITE, *Monasteries of the Wadi 'n-Natrân: Part I, New Coptic Texts from the Monastery of Saint Macarius*, N.Y. (1926), xlviii+299, 28 plates. Append. I by Dr. G. SOBY. The introduction (xxi-xlvi) gives a very full and interesting history of the monastery library from which so many European collections have been enriched. Most of the texts are fragmentary and in many cases they are complementary to other fragments already published by Tischendorf. The texts include apocrypha (nos. 1, 3-8), encomia on saints (9-13), martyrdoms (14-22), texts relating to St. Macarius (23), hymns from the Dihnâr and kindred books (2, 24), homilies (25-36), Biblical fragments (37), liturgical fragments (38), and vocabularies (39), with three supplementary texts. Many of these are not reproduced in full, but merely described with lists of variants from texts already published. There are two appendices, (I) by Dr. SOBY, giving portions of an Arabic MS. in Coptic script (cf. sect. VII above); (II) an account of the lesser monasteries of Scetis. It is reviewed in the *Times Lit. Suppl.* for 23 Sept. (1926), 631, by Th. LEFORT in *Muséon*, XL (1927), 151-2, and by D. O'LEARY in *Journal*, XIII, 128-9.

W. H. P. HATCH, *A visit to the Coptic Convents of Nitriâ*, in *Annual Amer. School of Or. Res. for 1924-5* (1926), 93-137, 6 illustr., describes the present condition of the monasteries which the writer visited in 1923.

U. MONNERET DE VILLARD, *Rapporto preliminare sugli scavi al Monastero di S. Simeone presso Aswân*, 1924-5, in *Rend. Acad. Lincei*, 1925, 289-301, 1 tav., and the same writer's *Descrizione generale del monastero di San Simeone presso Aswân*, in *Ann. Serv.*, XXVI (1926), 211-42, 2 plates, give an account of his excavations in and around the remains of an 8th cent. church of the monastery of St. Simeon near Aswân. In the latter work he gives a Coptic inscription (227) and notes, dates of graffiti, etc.

The second volume of U. MONNERET DE VILLARD, *Les couvents près de Sohag*, II, Milan (1926), 135 + addenda + index, figs. 113-222, has appeared (for former vol. cf. *Journal*, XII, 311) and continues the historical account, architectural details, etc. of the White Monastery. The earlier volume has been reviewed by A. GABRIEL in *Syria*, VII (1926), 98-9. Supplementary to this is U. MONNERET DE VILLARD, *Una pittura del Dayr el-Abiad*, in *Racc. Lumbroso*, 1926, 100-8. Throughout the author's interest is mainly confined to the White Monastery.

F. LL. GRIFFITH, *Oxford Excavations in Nubia*, is continued in the Liverpool *Annals of Archaeology and Anthropology*, XIII (1926), 17-37, Plates 12-30; and 47-93, Plates 31-65. Ch. XL deals with Meroitic antiquities at Faras and other sites, XLI with the fortified enclosure at Faras. Ch. XLIV gives a history of Christianity in Nubia, XLV deals with the Christian antiquities found at Faras (Pachoras). These include a few Greek and Coptic tomb-stones and graffiti in the churches, a long Coptic inscription from the cell on the edge of the desert, numerous frescoes and architectural details. "As to the western border of Faras, the inscriptions...are purely Coptic from the eighth to the tenth century....One may conjecture that at that time in the population of Pachoras, the provincial capital, there was a distinct Coptic religious element with a special quarter or settlement in the west, and the arrival of this element before 739 may be connected with the dispatch of Monophysite teachers from Egypt" (56). Ch. XLVI deals with Christian remains in and about the enclosure, including several churches, and XLVII with the church by the rivergate. Plate 63 gives an inscription, 64-5 graffiti, frescoes are reproduced in 34, 35, 54-61, and types of pottery, terra cotta and sculpture in 38, 39, 52, 53, 62, 64, 44, and 45.

H. JUNKER, *Ermenne. Bericht über die Grabungen...auf den Friedhöfen von Ermenne (Nubien) im Winter 1912-13*, Wien (1925), 175, 9 plates, 17 illustr., and map. Some of the remains described belong to the Christian period. Nine fragmentary inscriptions are in Coptic (150-2). Incidentally the writer deals with the Christian period in Nubia (136, 155, 166).

H. JUNKER, *Toschke*, Wien (1926), 157, 1 plan, 38 plates, contains no Christian or Coptic material.

H. JUNKER, *Das Kloster am Isisberg* (cf. *Journal*, IX, 233), is briefly reviewed by E. W. in *Byz. Zeit.*, XXVI (1926), 207-8.

M. CHAÎNE, *L'église de Saint-Marc à Alexandrie construite par le patriarche Jean de Samanoud*, appeared in *R.O.C.*, 1924, 372-86. Reference to this church occurs in the Synaxarium for 4 Abib.

(b) *History of Art and Architecture.*

O. M. DALTON, *East Christian Art* (cf. *Journal*, XII, 311), has been reviewed by J. SIMON in *An. Boll.*, XLIII (1926), 389, by C. DIEHL in *Byz. Zeit.*, XXVI (1926), 127-33,—a very full review with notes on

some errata (133),—by M. CONWAY in *Burl. Mag.*, XLVIII (1926), 206-11, by S. R. in *Rev. arch.*, XXIII (1926), 94-5, and by H. LIETZMANN in *Deut. L. Z.*, N.F. 4 (1927), 914-17.

C. DIEHL, *Manuel d'art byzantin*, 2nd ed., 2 vols., Paris (1925-6), I, xv+480, II, 481-946, contains references to Egyptian ecclesiastical art. Vol. I, ch. 3 (60-86) deals with "les origines égyptiennes" and makes use of Coptic illustrations (61-2, 65, 73, 76, 81, 83): Vol. II has but few references to Coptic material (cf. 618). It has been reviewed by L. BREHIER in *Rev. Hist.*, CXLVIII (1926), 252-4, and by H. D(ÉLEHAYE) in *Ann. Boll.*, XLIII (1926), 389-94.

J. STRZYGOWSKI, *Origins of Christian Art*, translated by O. M. DALTON (cf. *Journal*, x, 330), has been reviewed by J. SIMON in *An. Boll.*, XLIII (1926), 384-6.

(c) *Sculpture, Pottery, etc.*

G. LEFEBVRE, *Une table eucharistique*, in *Ann. Serc.*, 1925, 160-2, describes a table found at Tell Ebschan.

H. LECLERCQ, *Ivoires*, in *Dict. d'arch. chrét.*, VI, fasc. 76-7 (1927), 1925-87, devotes some space (1979-80) to Coptic ivories.

A. J. BUTLER, *Islamic Pottery*, Lond. (1926), 179, 92 pl., 22 in colour, devotes ch. III to the state of arts before the Arab conquest but does not touch on Coptic material save incidentally.

N. A. KRŽIŽANOVSKAJA, *Die koptischen Leuchter der Eremitage*, appears in *Sbornik der Eremitage*, III (1926), 70-87.

G. STUHEFAUTH, *Die apokryphen Petrusgeschichten in der altchristlichen Kunst* (1925), ix+139, has been reviewed by J. WAGENMANN in *T.L.Z.*, 1926, 345-6.

(d) *Textiles.*

T. DILLMONT, *L'art chrétien en Égypte: motifs de broderie copte*, 2 vols. (1924), 25, 30 figs. and 21, 30 figs., unfortunately escaped notice in previous bibliographies.

O. WULFF u. W. F. VOLBACH, *Spätkoptische und koptische Stoffe aus ägyptischen Grabfunden in dem Staatlichen Museum Kaiser Friedrich*, Berlin (1926), xiii+159, has been reviewed by G. ROEDER in *Lit. Woch.* (1926), 1256, and by J. STRZYGOWSKI in *Z. f. Bild. Kunst*, LX (1926-7), 91.

M. DIMAND, *Die Ornamentik d. ägypt. Wollwirkerei* (cf. *Journal*, XI, 326), has been noticed by H. KEES in *Deut. L. Z.*, N.F. 3 (1926), 6.

(e) *Magic.*

(Cf. also "Magical Texts" in Sect. VI above.)

F. LEXA, *La magie dans l'Égypte antique de l'ancien empire jusqu'à l'époque copte*, 3 vols., Paris (1925), I, 200; II, 235; III, atlas of ix pages and 71 plates, devotes a considerable part to Coptic magic (vol. I, chs. 6, 7), and gives a series of Coptic magical and other texts (vol. II, including "formules, en ancien copte, du grimoire grec de la Bibl. Nat. à Paris, papyrus magiques coptes, livres de médecine copte... Apophthegmata Patrum Aegyptiorum, la lutte de l'apa Moïse contre le démon Bes... biographie de l'apa Shenoute," etc. It has been reviewed by A. CALDERINI in *Aegyptus*, VII (1926), 338-40, by M. A. M. in *Ancient Egypt*, 1927, 27-8, by A. WERNER in *Bull. School Or. Stud.*, IV (1927), 661-3, and by P. P(ETERS) in *An. Boll.*, XLIV (1927), 129-32. The latter points out that the writer uses the term "magic" in rather a loose sense, counting all religious rites as magic, with the single exception of prayer. "À côté de rites proprement magiques que les chrétiens coptes paraissent bien avoir empruntés aux sorciers de l'ancienne Égypte, on voit figurer pêle-mêle des recettes de charlatans et des 'miracles' tirés de la vie des Pères du désert" (132).

MARCUS SIMAIKA PASHA is preparing a catalogue of the contents of the Coptic Museum which has recently acquired some interesting pieces of ancient church furniture.

The *Catalogue général des antiquités égypt. du Musée du Caire* (1925), viii+181, 24 plates, has been reviewed by A. in *Rev. Bibl.*, XXXVI (1927), 145-7: it is not concerned with Coptic material.

Dr. G. SOBHY, *Coptic Museum in Cairo*, in *Ancient Egypt*, 1927, 10-13, 7 figs., is a general description of the collection in whose formation the writer has taken a leading part.

With regret we notice the death of Professor H. GOUSSEN of Bonn, who was known as a Christian Orientalist and in former years did some Coptic work—an edition of St. John's Gospel in Sa'idic and various liturgical studies.

ADDENDA.

I. BIBLICAL.

PORCHER, *Livre de Job* (cf. *Journal*, XI, 320), is reviewed by W. SPIEGELBERG in *O.L.Z.*, 1927, 358-9. On p. 83 of *Journal*, XIII will be found an emendation of the text in H. THOMPSON, *Gospel of St. John*.

III. LITURGICAL.

G. MERCATI, *Un frammento della liturgia Clementina su papiro*, in *Aegyptus*, VIII (1927), 40-42, is an identification of a text published by WESSELY, in *P.O.*, XVIII, 434.

E. L. RAPP, *Zwei Koptische Hymnen für das Epiphaniensfest*, appears in *J. Soc. Or. Res.*, XI (1927), 145-151.

V. HISTORY.

W. E. CRUM, *Some further Melitian documents*, in *Journal*, XIII, 19-26, deals with Brit. Mus. P. 2724, Clarendon Press 50 fo. 2, and an Oxyrhynchus frag. H. I. BELL, *Two official letters of the Arab period*, in *Journal*, XII, 268-81, contains a reference to a Theban monastery's failure to pay the poll-tax. LEFORT, *S. Pachomii Vita* (cf. *Journal*, XII, 309), has been reviewed by W. E. CRUM, in *J.T.S.*, XXVIII (1927), 326-8.

E. BRECCIA, *Juifs et Chrétiens de l'ancienne Alexandrie*, Conférence, Alexandrie, 1927, is reported in *Aegyptus*, VIII (1927), but I have not seen a copy.

SCHUBART, *Aegypten von Alexander...bis auf Mohammed* (cf. *Journal*, IX, 230), is reviewed by J. R. LUKES, in *Listy Filolog.*, LIII (1926), 291-3.

KAMMERER, *Essai* (cf. *Journal*, XI, 308), is reviewed by A. VITTI, in *Biblica*, VIII (1927), 238-41, and by S. A. B. MERCER, in *J. Soc. Or. Res.*, XI (1927), 152-3.

VI. NON-LITERARY TEXTS.

EITREM, *Papyri Osloenses* (cf. above), has been reviewed by S. R. in *Rev. Arch.*, XXIV (1926), 96, by M. HOMBERT in *Rev. Belg. Phil.*, V (1926), 546-7, by K. PREISENDANZ in *Phil. Week.*, XLVI (1926), 401-9, and by the same writer in *O.L.Z.*, 1927, 99-100.

GHEDINI, *Lettere cristiane* (cf. *Journal*, X, 329), has been reviewed by F. BILABEL, in *Phil. Week.*, XLVI (1926), 492.

VII. PHILOLOGY.

W. CZERMAK, *Rhythmus und Umbildung im Ägyptisch-Koptischen*, appears in *Z.D.M.G.*, XXXIX (1927).

H. S. GEHMAN, *The comparison of inequality in Coptic*, was a lecture delivered to the "Linguistic Society of America" at the Cambridge (U.S.A.) convention in Dec. 1926 (cf. *Language*, III (1927), 37).

VIII. ARCHAEOLOGY.

WINLOCK-CRUM-WHITE, *Monastery of Epiphanius* (cf. above), has been reviewed by H. LECLERCQ, in *Journal*, XIII, 125-7, and, with WHITE, *Monasteries of the Wadi 'n-Natrun* (cf. above), by F. C. BURKITT, in *J.T.S.*, XXVIII (1927), 320-5.

GRIFFITH, *Oxford Excav. in Nubia* (cf. above) is reviewed by A. WIEDEMANN, in *O.L.Z.*, 1927, 168-9.

H. RANKE, *Koptische Friedhöfe* (cf. *Journal*, XII, 311), is reviewed by G. STUHLFAUTH, in *O.L.Z.*, 1927, 356-8. M. DE VILLARD, *Les convents pris de Sohag*, II (cf. above), is briefly noticed by A. C(ALDERINI), in *Aegyptus*, VIII (1927), 204.

H. MUNTER, *Remarques sur la stèle copte 11799 du Musée d'Alexandrie*, pp. 5, is a reprint from *Bull. Soc. Arch. d'Alex.* XXII (1926).

NOTES AND NEWS

It was a misfortune for the Society that the Council of the Society of Antiquaries was unable to allow the holding of our usual exhibition of antiquities in its rooms at Burlington House in July, a favour which has been granted for many years past and very greatly appreciated by our members. Not only is the position a central one and likely to attract visitors, but also the courteous welcome and ungrudging assistance extended to us by every member of the staff have added considerably to the success of former exhibitions.

The season of 1926-27 at Tell el-'Amarnah was short: consequently the finds were not numerous, and the Committee therefore decided to hold the exhibition at the offices in Tavistock Square. Dr. Frankfort contributes in another part of this *Journal* an article describing the work and illustrating some of the objects found, and thus little detail need be given here: suffice it to say that Dr. and Mrs. Frankfort, both indefatigable in the interests of the Society, worked hard to make the exhibition both attractive and interesting to all who visited it. On one screen were set out photographs of all the objects retained by the Egyptian Government for the Cairo Museum. Among the objects shown were bronze ritual vases from the Temple of the Aten, bearing cartouches of the Aten, the King and the Queen, fragments of statuary of excellent quality, but alas fragments only, examples of the typical Tell el-'Amarnah coloured pottery, besides smaller fayence and glass objects such as rings, pendants and beads. One important feature was a collection of pieces of fresco-work from which it will be possible to reconstruct the typical house decoration of the 'Amarnah period. The choicest of these were the coloured frescoes discovered by the late Mr. F. G. Newton in the women's quarters of the North Palace and removed by Mrs. Frankfort, after having been copied by Mrs. N. de Garis Davies, whose beautiful copies were on show, as well as those portions of the original frescoes which we were allowed to bring to this country.

The exhibition was open from July 5th to July 22nd, and since its close the antiquities have been packed and despatched to the various museums at home and abroad to which they have been allotted by the Distribution Committee.

In the present state of the Society's finances it is impossible to send out an expedition during the coming winter. While expenses of travelling, transport and labour have increased, the special donations to the excavations have fallen off considerably, and the annual income derived from subscriptions only suffices to provide for the administration of the Society and for the *Journal*. The Committee has therefore decided to do no field-work during the winter 1927-28, but to ask Dr. Frankfort to concentrate on working up the results of his two seasons in Egypt so that their publication may be hastened. In particular the volume to be called *The Mural Paintings of Tell el-'Amarnah* will be put in hand at once. The two concessions of Abydos and El-'Amarnah are still to be retained, and it is hoped that more donations may be forthcoming in the near future, so that field-work may be renewed in the winter of 1928-29.

The work of photographing the scenes and inscriptions in the Temple of Seti I at
Journ. of Egypt. Arch. XIII.

Abydos has been placed under the Archaeological Survey branch of the Society's activities, and Dr. Alan Gardiner has been appointed Editor to this branch, Professor Griffith still retaining his position as Director. Mr. R. O. Faulkner and Mr. H. Felton brought home a large series of excellent photographs, and at present these are in the hands of Dr. Blackman, who, with the assistance of Miss Calverley, is preparing them for publication. It will be necessary for Dr. Blackman, or some other philologist, to go to Abydos and there collate the schematic drawings with the original texts once more before any publication will be possible, but no date has yet been fixed for this work.

The series of lectures for 1927-28 is to deal with some "Great Personalities in Egyptian History." The dates have not all been arranged at the moment of going to press, but the following lectures have been promised: Tuthmosis III by Dr. H. R. Hall; Amenophis III by Mr. S. R. K. Glanville; Akhenaten by Dr. H. Frankfort; St. Athanasius by Mr. Norman H. Baynes; Ptolemy II by Mr. W. W. Tarn; and Ramesses III by Mr. Walter B. Emery. They will again be held in the Meeting Room of the Royal Society, a privilege for which we are much indebted.

It is very much to be regretted that the Bibliography of Ancient Egypt which Professor Jean Capart has very kindly undertaken to prepare in place of Professor Griffith, who has done this heavy task for a great number of years, cannot, owing to the shortness of the notice given to him, be ready in time for printing in this number. It will therefore be held over until the first double number of the next volume.

Historically speaking our Bibliography of Ancient Egypt is a gradual development of the article called Progress of Egyptology which appeared in the earliest number of the Archaeological Report issued by the Society in 1892-93. From that date until 1926 Professor Griffith has devoted some part of his time each year to the compilation of this bibliography, as to the high value of which all students of Egyptology are agreed. Useful, however, as this work may be there is other work of a more specialized kind awaiting him, to which he is anxious to devote his time and thought, work which can be done by few, if any, except by him. While therefore we regret his decision to abandon the bibliography we cannot doubt that he is right. We trust that he will look back not without satisfaction to the rather tedious days spent, over a period of thirty years, in preparing a work which has considerably lightened the labour of one and all of his colleagues.

Oxyrhynchus Papyri Part XVII by Professor A. S. Hunt, F.B.A., being Vol. xx of the Graeco-Roman Memoirs issued by the Society, is now ready. It contains ninety-two texts, thirty-nine of which are literary, the principal novelty consisting of further important fragments of the *Aetia* of Callimachus, to the remains of which this series has already made such striking additions.

Among extant classical authors Pindar and Lycophron are represented, and more of the valuable MS. of Thucydides, of which pieces were published in Part I, has come to light. In the non-literary section, which includes several documents of special interest and importance, a return has been made to the Roman and early Byzantine periods.

The volume is intended as a memorial to the late Professor Grenfell, and contains a portrait of him and a Memoir written by Professor Hunt.

The Society has received from the Department of Antiquities in Egypt permission to sell casts of the head of a princess found last year by our expedition at Tell el-Amarnah and illustrated in this number in Plates lii and liii. These casts, which are now available, may be obtained for half a guinea, carriage paid, from the Secretary at the Society's offices.

The Seventeenth International Congress of Orientalists will be held at Oxford in the coming year during the week beginning August 27th. The Secretary of the Congress, Mr. C. N. Seddon, Indian Institute, Oxford, will be glad to send to any who may ask for it a circular Bulletin with full information as to membership, arrangement of sections, etc.

We regret to have to announce the death of Dr. E. S. Hartland. Dr. Hartland began his career as a solicitor in Swansea in 1871, but migrated in 1889 to Gloucester, where for many years he took a prominent part in municipal affairs, and held the Mayoralty in 1902. Despite the preoccupations of so busy a life he found time to devote to his favourite study of anthropology, in which he rapidly acquired a name for himself, becoming President of the Folk-lore Society in 1899. In 1906 he presided over the Anthropological section of the British Association. He delivered the first Frazer Lecture at Oxford in 1922, and was invited to give the Huxley Lecture in 1923, an invitation which ill-health prevented his accepting. He was a Fellow of the Society of Antiquaries, and an Honorary F.S.A. of Ireland. In 1917 he received an honorary LL.D. at St. Andrews, and in 1924 an Honorary D.Litt. from the University of Wales. His best known publications in the anthropological field are *The Science of Fairy Tales* (1890), *The Legend of Perseus* (1894-5-6), *Primitive Paternity* (1910), *Ritual and Belief* and *Primitive Law*.

Professor A. E. R. Boak sends us the following notice of the late Professor Kelsey, a scholar well known in this country and on the continent, whose death leaves a gap not easy to be filled:

On May 14th, after an illness of several weeks, Professor Francis Willey Kelsey of the University of Michigan died at Ann Arbor just a few days before the completion of his sixty-ninth year. In spite of the fact that he had been under medical care since his return from Egypt in April, his death came as a great and unexpected blow to all his friends. A graduate of the University of Rochester, Professor Kelsey was called to the chair of Latin Language and Literature at Michigan in 1889 and held this position until his death. Although his work as an editor of classical texts, as a translator (Mau-Kelsey, *Pompeii*, 1889; Grotius, *De Iure Belli et Pacis*, vol. 1, 1927), and a contributor to classical journals earned him a well-deserved reputation as a scholar, it was mainly as a protagonist of the position of Classics in education that he became so prominent a figure in American University life. In 1907 he had the unusual honour of holding the presidency both of the American Philological Association and of the Archaeological Institute of America, and he continued to serve as president of the latter society until 1912. As editor (since 1904) of the Humanistic Series of the University of Michigan Studies he greatly stimulated the work of research among scholars both of his own and other universities. Since 1919, Professor Kelsey's main efforts had been devoted to the promotion of research in the history and civilization of the Near East. The fruits of these labours

are to be seen in the work of the University of Michigan Expeditions—to the Near East in 1919, to Antioch in Pisidia in 1924, and to Karanis in Egypt, where excavations have been conducted continuously since 1924. It is due to his vision and energy that the University of Michigan has acquired its papyrus collection (now of nearly 5000 inventory numbers), the Burdett-Coutts collection and many other classical manuscripts, the major portion of the oriental library of the Sultan Abdul Hamid, and a large and valuable collection of Greek and Roman archaeological material. In planning his activities Professor Kelsey never thought of himself or his own interests, but ever of the scholars of the present and future generations who would profit by the material which he assembled and made accessible for their interpretation, and he displayed a remarkable appreciation of what needed to be done and what could be done in many different fields. By his death, the University of Michigan has lost one of the foremost members of its faculty, the friends of the study of ancient civilization an enthusiastic champion, and his associates an inspiring leader and a loyal friend.

It is with peculiar pleasure that we welcome the appearance of Dr. Alexander Scott, D.Sc., F.R.S., as a contributor to this number. Dr. Scott is the Director of the Laboratory of the British Museum and is one of the foremost exponents of a new science, that of preserving and restoring objects whose condition has deteriorated owing to centuries of existence in unsuitable surroundings, a science in which another of our contributors, Mr. Lucas, has also made a name for himself. The literature of this science, which has a very high importance for the archaeologist, is as yet very small both in England and abroad, and we trust that both Dr. Scott and Mr. Lucas will add to it in the pages of the *Journal*.

When in our last number we regretfully announced Mr. Robert Mond's intention to withdraw from active excavation in Egypt we expressed a hope that this did not mean his retirement from work of every kind in the Egyptian field. This hope was not vain, for Mr. Mond is already making arrangements for the publication of the tomb of Ramose, one of the finest in the Theban necropolis, a tomb partly excavated by Mr. Mond himself and in great measure restored by him to its original form and magnificence. It is not yet finally decided who is to be responsible for the various parts of the publication, but no effort will be spared to make it worthy of the subject. It will probably be published by the University Press of Liverpool.

During the summer Mr. Mond held in Liverpool an exhibition of antiquities found by him during his twenty-five years of excavation in Egypt. In addition to many of the finest objects from Mr. Mond's own collections the exhibition contained models in cardboard of the various tombs excavated and preserved by him, with small scale photographs showing in position on the walls the various sculptured and painted scenes. With the aid of these models and a very carefully arranged catalogue it is possible at once to find the reference number of any particular negative required among the large series of record photographs which Mr. Mond has put together.

The exhibition was opened by the Acting Vice-Chancellor of the University of Liverpool, Professor Wilberforce, and attracted a large number of visitors in the fort-

night during which it was open. Mr. Mond himself took part in the opening ceremony, and afterwards entertained at dinner a number of those connected with the University and more especially with one of its departments, the Institute of Archaeology, in whose name Mr. Mond's excavations have for the last few years been carried on.

During the next few days the publishing house of Messrs. Bocca in Turin will issue the first fascicule of the first volume of a publication of the famous Turin papyri. The volume contains photographic reproductions of the papyri, hieroglyphic transcriptions, translations, and very short introductions and commentaries. It is devoted entirely to the more considerable portions of the Diary of the Great Necropolis of Thebes towards the end of the Twentieth Dynasty. In this work the Editor of the *Journal* has had the privilege of taking a part, the other collaborator being Dr. Giuseppe Botti of Turin.

If we announce the volume here it is partly because, as the first instalment of the long awaited publication of the Turin Papyri, it marks an event of some interest and importance, partly in order to take this opportunity of doing justice to the work of Dr. Botti and of Signor Baglioni, to whom the calligraphy of the transcriptions is due. Dr. Botti has for some years, in the spare hours snatched from an arduous profession, been working at the reconstruction of some of the Turin papyri from the thousands of fragments. The success which his patient efforts have met will be realized by those who will examine the sketch of the reconstructed portion of the Journal of Year 17 published in the first fascicule. Signor Baglioni is the official draughtsman to the Turin Museum. At very short notice and with little opportunity for practice he has succeeded in producing a hieroglyphic script which is already in some respects the best which has yet been seen in a publication, and which, with more experience, should become very close to the ideal in this difficult art. The volume is dedicated to Professor Schiaparelli, the Director of the Museum, who has encouraged the work and the workers from start to finish.

The month of September found quite a large group of Egyptologists at Turin. M. B. Bruyère, Director of the French excavations at Dêr el-Medinah, was working at the material found on that site by Professor Schiaparelli some years ago. Drs. Černý and Botti and the Editor were all three busy with the necropolis papyri. Dr. Gardiner spent a few days there doing preliminary work on the Papyrus of Kings, with a view to reporting on the possibility of obtaining a better grouping of the fragments, based possibly on the study of the text on the back. His present work was limited to a rigorous collation of both faces. We may add that his collation of the King List itself was not altogether unfruitful and that he has at least two pleasing surprises for Egyptology.

Dr. Hall sends the following note with regard to his article in the last number of the *Journal* on the Head of an Old Man, No. 37883, in the British Museum (xiii, 27 ff., Pls. xi, xii):—"I inadvertently omitted to mention in my article the previous publication by Sir Ernest Budge of photographs of the head No. 37883, first in his *History of Egypt* (1901), iii, 131, and then in the *Guide to the Third and Fourth Egyptian Rooms* (1904), 95. In the first case no description was appended, and in the second it was of necessity very short. Dr. von Bissing has shortly discussed the date of the head, without giving any

picture of it, in v. BISSING-BRÜCKMANN, *Denkmäler ägyptischer Skulptur*, Text, Taf. 26 A, note 21, and Taf. 27, note 10, with much the same result as I: he calls it 'Saïte,' chiefly owing to the treatment of the eyes, which indeed seems to me to be very definite evidence of its date. I should fix the attribution more precisely as 'Saïte-Theban' or 'late Theban of the Saïte period,' not, therefore, Saïte in the usual acceptance of the term¹. I had not seen Dr. v. Bissing's reference to the head when I wrote my article, so that our similar conclusions are independent. In describing it as of 'krystallinischer Kalkstein' Dr. v. Bissing is in error: it is not crystalline limestone, but white quartzite sandstone. Dr. v. Bissing discusses it with reference to his illustration (Pl. 26 a) of the well-known beardless king's head, bearing the white crown, in greenish-black slate, in the Ny-Carlsberg Glyptotek at Copenhagen, which has usually been described as of the Twelfth Dynasty, whereas I have always been of opinion personally that it is late Saïte, in which view I am glad to find myself in agreement with Dr. v. Bissing and with Weigall. I however would say that it is very late Saïte, possibly in reality of the Sebennytite period (4th cent. B.C.), whereas Weigall would make it a portrait of Amasis II². The face to me does not seem and never has seemed to be anything like real Twelfth Dynasty work. Its spirit is totally different. It is archaistic. It has an artificial rawness, a sham ferocity and vigour, quite easily distinguishable from the genuine energy of heads of the Middle Kingdom. The treatment of the surface of the face, of the eyes especially, and the form of the crown are for me distinctly of the Saïte-Ptolemaic epoch, and would consequently make me date it later than Dr. v. Bissing or Weigall, with whose arguments concerning it I am otherwise in agreement. It does possibly, as von Bissing says, shew an attempt at archaizing in the style of a period much earlier than that of the Twelfth Dynasty, namely the Second-Third; cf. the head of the sitting figure of Khasekhemui in the Ashmolean Museum. Its inspiration is from the Old as much as from the Middle Kingdom, and the early Old Kingdom at that. But that it is as a matter of fact archaistic, and archaistic of a late period, there seems to me to be no possible doubt. I believe it to be a portrait of Achoris or some other late king. The old man's head in the British Museum, however, can hardly be described as archaistic. Its resemblances to Twelfth Dynasty or Eighteenth Dynasty style hardly amount to conscious archaism. The Saïte-Theban style, while of course influenced by Memphite archaism, seems to me to have been a natural local artistic development."

Prof. W. L. Westermann, having seen in MS. the article, *A Parallel to Wilcken, Chrest.* 144, published above, has been kind enough to check the suggestions there made for readings in P. Oxy. 477, which is now in the library of Columbia University. He sends the following notes:

l. 19. τελειο]ῦντι fills the space better than ποιοῦντι, which leaves $\frac{1}{4}$ in. of the lacuna unfilled.

l. 20. τῇ[ν εἴσκρῖσιν καὶ ἐφηβ]εῖαν is better than τῇ[ν ἐσομένην ἐφηβ]εῖαν because of space.

l. 22. [μῶνος γράμματα ἔπειτα] exactly fills the space.

l. 24. [οὔσι προσδέξασθαι αὐτό]ν fills the space. The first letter after the lacuna is better read ν. The iotas are all slightly longer than the first stroke after the lacuna (which

¹ WEIGALL, *Ancient Egyptian Works of Art*, p. 320, assigns the same date to it as I.

² *Ibid.*, p. 322.

I should read as ν), as the next letter (iota) shows. I see no trace of the a of the editors except a spot which is better read as the middle stroke of ν .

l. 25. [ἐφῆβους ἔν' ὃ πεφιλανθρ]ωπ(ημένη) exactly fills the space. ἔν' ὃ π(εφ.) cannot be read because of space.

Mr. N. de G. Davies writes:

I should like to note in reference to my article in *Journal*. XII. p. 110. that I was ignorant when I wrote it that Frau Klebs in her excellent book *Die Reliefs und Malereien des Mittleren Reiches*, p. 65, had already reached the same conclusion from a study of Tylor's publication alone. The merit of the observation, therefore, is hers.

NOTICES OF RECENT PUBLICATIONS

Hermetica. The ancient Greek and Latin writings which contain religious or philosophic teachings ascribed to Hermes Trismegistus, edited with English translation and notes by WALTER SCOTT. Volume II. *Notes on the Corpus Hermeticum*. Pp. 482. Oxford: University Press, 1925.

Scott's text of the *Hermetica*, noticed in *Journal*, XI, 126 ff., is subjective in a high degree. His commentary, of which we have here the half concerned with the *Corpus* proper, does not carry conviction as far as his rewriting of much of the tractates is concerned. At the same time, it is a work of considerable value. Scott studied the writings of Hermes with a resolute conviction to find sense in them; when he found nonsense, he says so, and gives reasons. To have formulated so many difficulties is a service, even though further study may well show that not a little which Scott found intolerable in logic or language is nevertheless the kind of thing which men wrote in Egypt under the Empire. On the linguistic side this has been pointed out and well illustrated by H. J. ROSE, *Classical Review*, XXXIX (1925), 134. The main weakness of the commentary is that Scott regarded this literature too much from the standpoint of philosophy—too little from the standpoint of religion and theosophy. When he says, p. 97, "In the Mithraic cult the North Pole seems to have been of great importance," and refers to the so-called *Mithraisturgy* as proving this, he shows a striking unfamiliarity with the real nature of that document. On much in these texts Reitzenstein's incidental observations in the new edition of *Die hellenistischen Mysterienreligionen* and in his review of this volume (in *Gnomon*, 1927) provide a better commentary. Nevertheless it must be said that we have here a very useful collection of materials for an edition.

A. D. NOCK.

Das Alexanderreich auf prosopographischer Grundlage. By HELMUT BERVE. 2 vols.

As its title shows, this large and useful book is not a regular history of Alexander, but is in general a description and study of his environment, private and political. The first volume is divided into three sections dealing with the court, the army and the administration of the Empire, while the second is a sort of biographical dictionary, giving a critical account of every person mentioned in ancient records in connexion with Alexander. The book, however, is far from being a bare collection of material; for the scope of the work gives the author occasion to discuss many disputed problems, such as the origin and purpose of Alexander's deification, and to emphasize his conception of his hero by his criticism of the men who came in contact with him and of their reaction to his influence. About Egypt there is remarkably little in either volume and nothing noteworthy.

C. C. EDGAR.

L'impérialisme macédonien et l'hellénisation de l'Orient. Avec 7 planches (9 figures) et 4 cartes hors texte. Par P. JOUQUET.

This new contribution to the series called *L'évolution de l'humanité* is an excellent study, on broad lines, of the history of the Hellenistic period, well arranged and clearly written, learned and yet readable. In the first part the author gives an account of the conquests of Alexander, his political views and the organization of his Empire. The second and third parts describe its dismemberment among the rival diadochi and the fortunes of the new kingdoms down to the establishment of Roman supremacy. The fourth and largest section treats of the Hellenisation of the East, and the fact that two-thirds of this portion of the book are devoted to Egypt is a measure of the debt which history is beginning to owe to the papyri. Egypt indeed is the only country which possesses the requisite material for such a study. Needless to say, the editor of the *Papyrus grecs de Lille* is eminently qualified for this part of his task. He gives us a lucid and well-documented survey of Ptolemaic Egypt, the history of the dynasty, the administrative organization of the country, its economic system, the political status of the foreign and native elements of the population, their reaction on each other and the gradual growth of a mixed Graeco-Egyptian class of inhabitants throughout the *χώρα*. How meagre in comparison is our information about the corresponding conditions in the other oriental kingdoms (pp. 403-53).

In accordance with the plan of the series the book is intended primarily for the general reader, not for the specialist, though the latter also may derive considerable profit from it. In a work of this range it is of course impossible to avoid conflict with the views of other historians; and with regard to such large questions as the character and aims of Alexander there will be different opinions until the end of time. But in dealing with disputed points, as for instance the personality and rank of Ptolemy the governor of Ephesus (p. 222), M. Jouguet is cautious and reliable; he says enough to show that he has weighed the evidence, but he does not indulge in controversy or in elaborate footnotes which would disturb the flow of his narrative.

C. C. EDGAR.

Papyri russischer und georgischer Sammlungen [P. Ross.-Georg.]. Herausgegeben von GREGOR ZERETELI. iv. *Die Kome-Aphrodito-Papyri der Sammlung Lichačov*. Bearbeitet von PETER JERNSTEDT. Tiflis: Universitätslithographie. 1927. Pp. viii + 130. 3 plates.

The usual fate of any large collection of papyri found by natives is to be divided among the finders and eventually dispersed in various directions. So it was with the earliest extensive find, the Serapeum papyri, now re-edited in a single volume by Wilcken; so it was with the Heroninus archive (portions of which are in Florence, London, etc.), the Abinnaeus archive (Geneva and London), the Zeno archive (Cairo, Florence, London, and many other places); and so also it was with the Aphrodito papyri of the early eighth century found in 1901. The first portion of this archive to be published (by Becker) consisted of Arabic and Greek-Arabic papyri at Heidelberg (P. Schott-Reinhardt) with others at Strasbourg. On the publication of that volume the present writer recognized that several of the imperfect texts there edited were completed by fragments in the British Museum, which had acquired the major portion of the find, comprising Greek, Arabic, Coptic and bilingual documents. The Greek and Coptic papyri of the British Museum were later published in Vol. iv of the *Museum Catalogue*, the Arabic ones, as well as others at Cairo and Constantinople, separately by Becker. One Greek document of the collection appeared in Vol. III of Maspero's edition of the sixth-century Aphrodito papyri at Cairo; and others remained in private hands, several having been acquired in recent years by the British Museum, a whole collection of small fragments in 1926. The volume under review shows that a portion of the collection found its way (some fragments via Paris) to Russia. The volume contains only Greek texts, but Jernstedt states in his preface that the Lichačov collection includes also Arabic and Coptic fragments.

The importance of this archive, at present our principal source of information as to the administration of Egypt under the Umayyad Khalifs, is so great that the publication of a further portion would in any case be very welcome; but this volume is the more acceptable in that several of the Lichačov fragments belong to texts published in a very imperfect form in the British Museum Catalogue, and that two at least of the letters which it contains are of a novel kind and exceptionally important. The finders seem, for the purposes of division, to have cut many rolls in two, so that the right and left halves were sold separately and in several cases found their way into different collections. The opportunity thus offered, after the lapse of many years, of comparing the complete texts with his own conjectural restorations of the missing portions, is an interesting and salutary, if somewhat damping, experience for an editor. Experience of the London texts enables the reviewer to appreciate both the difficulties which the editing involves and the ability which Jernstedt has displayed in his handling of them. There are points in which his judgement is open to challenge and others in which a re-examination of the London texts makes it possible to correct him; but a detailed study of the volume serves only to strengthen the impression given by the first examination, that these texts were entrusted to the right hands, and that the editorial work is of very high quality. The volume is a most valuable addition to the series of which it forms part.

The first section consists of letters to the pagarch, supplementary to those in P. Lond. iv. Of these nos. 1, 3, 6, 8, 9, 10, 12 and 14 fit letters in the London collection. Notes on points of detail follow; I have had the advantage of discussing these (by correspondence) with Jernstedt.—

1, 1-5. The Russian half (right) of this letter is taller than that in the British Museum, so that the left half of these lines is missing. I feel some doubt as to the correctness of J.'s supplements and a good deal as to his interpretation of the clause beginning *ἐὰν ὁλως* (l. 6), which he takes as governed by [*γράφου*] in l. 3: "schreib uns...was du bereits...getan hast... — ob der überhaupt," etc. This construction seems to me very improbable, and out of keeping with the usual style of these letters. Probably the clause should be taken in connexion with that which precedes: "to send back those who remained in your

district (if indeed you did leave any in it at all)." (J. accepts this interpretation.) In l. 7 η[δη], which J. reads in the London half¹, is impossible; at most κ[α]ι could be read, but I think ἤ alone is probably the true reading, πρὶν ἤ being used for πρὶν alone. In l. 14, where the Russian half has παγαρχιας, J. suggests that ἐρέπας may be the true reading in the London half. εἰς ἐρέπας is however certain; hence παγαρχιας is a mere slip of the pen.

In translating 2 J. seems, by the insertion of an exclamation mark after "denn" (γάρ, l. 12), to indicate that this clause is a *non sequitur*. The γάρ is however quite in order, if we understand an ellipse: "tell them to pay the δαπάνη (not the μισθός), for we are arranging for the latter ourselves." (J. accepts this.)

3 In the footnote (p. 11) J.'s correction for P. Lond. 1341, 9 (χρυσίο[ν] ἀνυσον for χρυσίο[ν] πόσον) is correct. His supplement then follows. In l. 9 he renders διὰ σπράτας "auf der Strasse," i.e. "overland," in place of my "immediately." This seems clearly right. In l. 11 περισυνο[ν] is to be read in the London fragment (P. Lond. 1334, περισυμ, J. περισυν(ον)). So too in l. 13 J.'s ἐργασίαν is right.

4, introd. J.'s suggestion of δαπάν[η]ν in P. Lond. 1366, 9 is right. In l. 8 of no. 4, J. now thinks that αἰτο[ς] is possible; it certainly suits the context better.

5, the left half of a long letter relating to naval requisitions, has analogies to the letter (P. Lond. 1393+ Inv. no. 2586) published by me in *Journal*, xii, 275 ff., which may be used in places to reconstruct the missing portion. Thus, in ll. 16 ff. one may read αὐτῶν μέντοι παρεχόντων τὰ δι' αὐτῶν δημόσια τε καὶ ἐκστράδεια κατὰ μίμησιν τῶν τοιούτων (?), πέμπων πρὸς ἡμᾶς τὸ κατάγραφον κτλ.; in ll. 22 f. τοὺς ἐξεληθέντας ὑπὲρ τῶν ἰδίων χωρίων καὶ ὡσαύτως καὶ τοὺς μισθωθέντας ὑπὲρ ἐτέρων χωρίων (?); and the sense, though not the wording, of ll. 27-33 can be paralleled in ll. 47-49, 52-53 of the London letter². In l. 43 we may probably read at the end ἀπ[ο]στο(φῆς) (see P. Lond. 1366, 15, note). The next line is unintelligible as it stands. The true reading is μὴνῶν β ἐκ νο(μίσματος) α νο(μίσματα) ι (καὶ) [; i.e. "for 2 months at 1 solidus each, = 10 solidi, and...³."

6, which is made up of P. Lond. 1391 and a Lichačov fragment, is in more than one respect a very important document. It shows the procedure adopted to secure the supply of skilled labour necessary for the upkeep of the dockyards. Basil is here ordered to requisition youths who are to be apprenticed to the crafts of carpenters and caulkers. Secondly, since it specifies that the requisition is to be made from "the city, contributory villages, and notables of your district," it shows (1) that Aphrodito (and therefore, *a fortiori*, other capitals of pagarchies) was officially a πόλις, (2) that the *magni possessores*, the old feudal nobility, who in Byzantine times enjoyed the right of αὐτοπαγία, still formed, for certain purposes, a distinct taxable unit—a highly important addition to our knowledge. In the endorsement, extant only in the London half, I now read πα[ι]δῶν ἱν(α) παρ(ασ)χ(εθῶσιν) εἰς(ς) τ(οὺς) κτλ. (καὶ) [ἐτέρ(ous)]. This has helped J. to correct the reading of l. 10, which should be τῆς διοικήσεως σου δέξ[α] ἑ[ξ] [πα]ιδία κτλ. ἐμφανείς is therefore used absolutely—"notables⁴." Can P. Baden 93, which Bilabel, quite impossibly, calls a "Verzeichnis von Knabennamen des Ephebenstandes," be a list of such boys? As regards the word πόλις applied to Aphrodito, J. suggests in an excursus, very plausibly, that κόμη had now become part of the place-name, κόμη Ἀφροδιτώ not implying the status of a village.

7 is interesting as showing (l. 5) that the αὐλή τοῦ Ἀμυαλμουμνιν at Fustât was situated by the harbour. In l. 6 I conjecture [παρὰ τὸν ποταμόν], further specifying the position (cf. P. Lond. 1378, 7).

8, 2. J., who reads π[αραγ]γεῖλ[ον], tells me that π is certain. In the London portion however the first letter visible is very decidedly more like τ than γ. There was perhaps a blunder in the original. In l. 9 J. reads ηκοντῶν. The first two letters only are in the Russian portion; in the London half οντω is quite impossible. The reading is ἡ καὶ ἂν σύ (J. confirms this, as part of the α is visible in the Russian fragment⁵), and we must suppose an accidental omission, perhaps παρακούσης τῶν before γραμμάτων, as J. suggests; or the sense may be "if you *require further* letters from us."

10 is an important document, as it completes P. Lond. 1387 and shows that the relation between that letter and 1386 was even closer than I had supposed in my edition. The concluding passage (paralleled by

¹ These and similar suggestions by J. were made without seeing the originals.

² In l. 16 of that letter my α[ν]τ(οὺς) is to be corrected to α[ν]τ(οὺς) (cf. P. Ross.-Georg. 4, 6; 5, 15) and the note altered accordingly. In l. 10 read εἰ τι ἐδώθ[η] ἐκάστῳ αὐτῶν (J.). In ll. 20 f. read ἐν τῇ διαστολῇ ἀλλὰ περιερχόμενος τὴν διοίκησίν σου καὶ ἐπισκεπτόμενος [χάριν] πάντων (J.).

³ Dr. Jernstedt has kindly sent me a photostat of these lines, from which the above readings were made.

⁴ J. remarks that in P. Lond. 1345, 6, also ἐμφανῶν is probably to be taken absolutely, in apposition to προσώπων, not as an attribute to it.

⁵ J. has kindly sent me a photograph, which fully bears out what is said above.

1386, 8–11) still remains very difficult. J. may well be right in explaining *παρελθεῖν* (see his excursus) as “to call upon,” i.e. to collect a tax from, but I cannot believe that *ἀνυσον* can refer to anything but the collection of a tax or, consequently, accept J.’s explanation of the passage. (He writes that he himself now regards it as impossible.) I should understand *ναῦλον* after *τό* in l. 13. There may have been a special *ναῦλον*-tax associated with the *embola*, which could also be used for freightage charges generally; but the point is very obscure¹. In l. 6 perhaps *κ[ούρσον καὶ ἄλλων]*, *κοῦρσον* being used absolutely of the annual raid (cf. P. Lond. 1354, 3; 1349, 16).

15 is a very important text, and stands quite apart from the others in its character. The subject is that of inheritance. Apparently the local officials had ventured illegally to confiscate a percentage of the estates of deceased persons, and *Qurrah* is here warning Basil and his subordinates against the practice. Unfortunately, not only has the letter lost the beginning and a portion from the middle but every line is imperfect on the right; and a comparison of the composite texts in this volume with the portions of them edited in P. Lond. IV will show how difficult it is to fill extensive lacunae even when the subject and formulae can be paralleled elsewhere. In this case, since the letter is unique in subject, the difficulty is increased, and as a matter of fact several of J.’s supplements are open to grave doubts. Particularly is this the case with ll. 6 f.; nor do I see how, even granting the supplement, J.’s translation can be got out of the Greek. We can only hope that more of this letter may yet be discovered.

16 is of even greater general interest, as it contains a prohibition of torture by the use of vinegar and chalk—a prohibition dictated, it may be added, not by humanity but by economic considerations, since this form of torture was more apt than others to render the victim *ἀνίατον καὶ ἀργόν*. Here too only half (the right side) of the letter is preserved, but the supplements can be regarded with greater confidence both because the portions preserved give rather more guidance, and because an analogy is furnished by a letter republished by J. (who had edited it previously in the *Bull. de l’Acad. d. Sc. de Russie*, 1921) in an appendix. This extremely interesting and important document gives an account of the writer’s sufferings at the hands of the Persians, who *ἐβασάνισέν* (l. -σάν) *μοι ἀπὸ ὠξιτήου* (l. ὠξιδήου) *καὶ μαρμάρων* (l. μαρμάρων) *εἰς τὸ* (l. τὸ) *στόμα καὶ εἰς τὴν ῥήναν* (l. ῥίναν), marble here taking the place of chalk. Mr. Nock has pointed out (*Class. Rev.* XLI, 58) that the same form of torture is referred to in the *Frogs* of Aristophanes: *ἔτι δ’ ἐς τὰς ῥίνας ὄξος ἐγγέων* (l. 618).

The second section consists of accounts and lists, which are of less interest than the letters or than the London accounts. It may however be pointed out that no. 20 is quite certainly the bottom of the left portion of P. Lond. 1416 (cols. *a–h*) and 19 is no doubt the bottom of A, col. *m*, of the same. 21 recalls P. Lond. 1426, though *διαγρα(φῆς)* is followed by *two* columns of figures instead of one as in the London account; and 23 might conceivably be part of P. Lond. 1429. In 20 recto, 8 J. informs me that the impossible figure *βτβς* should really be *βτρς*, and that at the end of the line *μη* over a deletion is probably to be read; in 27 II b, 3 ζ[ημ]-*τω υπονργγ* is to be read. In 24 A I read the name in l. 23 (from a photograph sent me by J.) *Παιεθολε*; in l. 19 it appears to be written *Πισεθολε*. The following suggestions made by J. for correction of the London accounts may be accepted. P. Lond. 1420, 11 (J. p. 81) *Πκαπατας* can be read; in 1481 *Πκαπατας* is just possible. In P. Lond. 1481 (J. p. 81) *Παζ τζαλιον* is possible.

At the end are collected some small fragments, and after the appendix already referred to are the indexes.

H. I. BELL.

The Vocabulary of the Greek Testament illustrated from the Papyri and other Non-Literary Sources. By J. H. MOULTON and G. MILLIGAN. Part VI by G. MILLIGAN; *παγιδεύω το ῥώννυμ*. London: Hodder and Stoughton. 1926. 10s. 6d. net.

This valuable work is now nearing completion. Undertaken by Moulton and Milligan in collaboration, it has had to be carried on, since the former’s death, by Milligan singly, though he has been able to make use of Moulton’s notes and references. The present part, which is almost entirely devoted to the big letter *π*, including the prepositions *παρά*, *περί*, *πρό*, *πρός*, illustrates as well as any the amount of labour which has gone to the making of this dictionary, the wealth of material contained in it, and the quality of the execution. As is well known, the work is far more than a vocabulary of New Testament Greek; for though the words treated are taken exclusively from the New Testament (though under them derivatives not there found are frequently dealt with in further illustration of the main word), yet the citations are drawn from

¹ In P. Lond. 1386, 13 J., very plausibly, suggests *ἐξωθεν τ[οῦ τῆς κτλ.* on the analogy of P. Ross.-Georg. 10, 13.

many sources, and the book is a perfect quarry of material for the language and usages of inscriptions and papyri, particularly the latter.

The treatment is remarkably full and the material in general well arranged. Naturally, criticisms of detail may be made here and there. For example, several references are made (*e.g.* under *πέμπω*) to the "letter of Psenosiris" under the supposition (due originally to Deissmann) that that letter refers to the banishment of a Christian woman during the great persecution. Mention should however have been made of the rival theory (now strongly reinforced by CRÖNERT, *Raccolta Lumbroso*, 515-528) that the reference is merely to the transport of a mummy for burial. Under *πληροφορέω* the use seen in P. Lond. 1075, 18 (III, p. 282) should have been cited: *πεπληροφορήμαι γὰρ σαφῶς ὅτι οὐ θέλετε αὐτὸν εἶναι ἐπὶ τοσούτου ἀνεγκέφαλον*, "for I am *fully persuaded* that you do not wish him to be so brainless." Under *πράγμα* reference might have been made to the semi-prepositional use of the word in conjunction with *εἰ μὴ* in P. Lond. 1348, 3: *εἰ μὴ τὸ πᾶγμα τῷ*ν=(practically) *ἄνευ τῶν*. Under *πρόσωπον*, prepositional phrases, might be cited P. Lond. 1360, 5 *ὁ [ᾧ]ν...ἐκ προσώπου* (l. *προσώπου*) *σου*, "your deputy"; *cf.* P. Grenf. II, 100, 5 *Βίκτορι ἐκ προσώπου Ἰωσήφ*, "Victor representing Joseph." The references under *ποτέ* are not very well arranged; it would have been better to separate the definitely temporal meanings, like *τόν ποτε ἡγούμ(ενον)*, from those in which the notion of time is practically lost, like *ὡς τινί ποτε ἀποστέρητήν*, "like some defrauder or other," *ὅσα ποτε οὖν ἐὰν ἀναλώσης*, "whatever you spend," *ὑπονοοῦμαι ὅτι πάντως πάλιν τί ποτε ἔχει πρὸς σέ*, "I suspect that he must certainly have some further claim or other against you." In the very full and useful bibliography it seems strange to refer to the 1910 translation of *Light from the Ancient East* and not to Deissmann's latest edition; and OLSEN's *Papyrusbriefe* should have been included.

But these are very minor points. This part, like its predecessors, is a godsend to students of the Greek language.

H. I. BELL.

Die Griechen in Ägypten. Von WILHELM SCHUBART. (*Beihefte zum Alten Orient*, Heft 10.) Leipzig: J. C. Hinrichs. 1927. Pp. 54. 2 plates.

This sketch of the history of Greek settlement and Greek culture in Egypt shows all the ripe scholarship and gift of attractive presentation which we have learned to expect in Schubart's work. In the interest of easy reading no references are given, and the scope of the volume does not admit of minute detail, but Schubart's name is sufficient warranty for the trustworthiness of his statements, and he shows, here as always, an unusual power of compressing a vast amount of material into small space without detriment to the readableness of his narrative. The book will be of great utility to the non-specialist as a masterly presentation of the main course of development, based on first-hand study of the evidence; and even the specialist will find it a stimulating and suggestive study.

H. I. BELL.

Ermenne, Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von Ermenne (Nubien) im Winter 1911-12. By HERMANN JUNKER, with a contribution by HANS DEMEL, plan, nine sheets of line drawings and sixteen plates (*Denkschriften d. Akad. d. Wiss. in Wien*, Bd. 67, Abh. 1). 1925.

This well-filled memoir represents but half of the results of an excavation completed in one month in Lower Nubia, the other half being dealt with in the companion memoir *Toschke* (see below). The digging was done by a force of twenty-three skilled Kufi excavators and some locals, of whom certain negroes were the most effective, the photography by a native Egyptian trained in Dr. Reisner's camp, and the supervision and recording by the energetic Professor and his sister, Fräulein Maria Junker. The present instalment describes an interesting series of cemeteries at Ermenne on the east bank of the Nile, one being of the "C-group," representing the native population at the time of the Middle Kingdom, one of the New Kingdom, one of the Meroitic period and three of Christian times¹.

¹ The sheet of plans at the end of the volume has no explanatory lettering or description, and demands some research to interpret it. It is therefore worth while to point out that the large plan in squares of ten metres is of the cemetery of the New Kingdom, reaching to and partly overlapping the Christian cemetery I at top left; the graves in the squares 10-12, i-l are all Christian. The small plan is that of Christian cemetery II. Graves shown in these plans are referred to in the memoir by square and number as 12. h. 7. There are no plans of the C-group, Meroitic and Christian III cemeteries; for these the graves are distinguished simply by numbers. One misses dimensions and scales for many of the objects figured in the plates.

In the C-group cemetery the stone superstructures had been removed for building, but happily the graves themselves were little plundered and yielded a good series of contracted skeletons (heads E.) with pottery and interesting accompaniments, more especially a series of leather sandals of a new and characteristic type. Junker places this cemetery late in C-group time.

The graves of the New Kingdom were also found in good condition, with extended skeletons (N. to S.) and amongst the accompaniments a characteristic "Kerma" type of razor of iron in place of the usual bronze, to put beside the iron spear-head of the same early period found by MacIver at Buhen (Halfa); as Junker points out this confirms to some extent the late Dr. Schweinfurth's suggestion that iron working came from Central Africa to Egypt. Not a few of the bodies were un-Egyptian and some were negroid, and an occasional mixture of contracted skeletons with pottery and sandals of C-group type amongst the Egyptian or Egyptianized burials proves the persistence of a certain amount of the Nubian culture into the Eighteenth Dynasty. The deposits in the New Kingdom cemetery appear not to go lower than the first half of the Eighteenth Dynasty.

The Meroitic cemetery was badly plundered, but the finds described by Herr Demel comprise some objects of interest. Those that are figured belong to classes B, C and D, *i.e.* to the Middle and Late Meroitic and Blemmy-Nubian periods, as defined in *Liverpool Annals*, XI, XII. It is noteworthy that the hand-made black wares of Faras and Buhen were very scantily represented at Ermenne as at Aniba, proving their southern origin. There are some serious errors of description and misunderstandings in the account of the grave of a child, numbered 40, which it seems worth while to clear up, as the analysis given of it, if correct, would completely upset my classification. The chief difficulty met with by Herr Demel seems to be in regard to the two little metal cups; they are described as being of lead (*blei*) which should probably be corrected to pewter (*Hartzinn*), a mixture of tin and lead, and the design in the centre of the ornamental one, figured on Tafel XII, No. 143, is attributed to the beginning of the fourth century A.D. on the strength merely of imperial busts, etc., on coins. The photograph, however, shows that the bust on the cup is moulded from a coarsely engraved gem of the commonest kind and could not be seriously judged by coin standards. To fortify my own inexpert opinion I submitted the figure first to Sir Arthur Evans, who pronounced it "a bust of Isis of coarse work, which might be as early as the third century B.C. or might be as late as the fifth century A.D.," and secondly to Dr. J. G. Milne, who would date the gem (?) either from the second century B.C. or the second century A.D. Milne having examined as an expert not only the hoards of coins found in recent excavations in Egypt but also several batches of seal impressions from the same, his verdict on the age of this somewhat contemptible and therefore particularly characterless example is of quite special value. The figures and descriptions of the associated objects leave little doubt that the grave belongs to my period B, to which is given the date first-second century A.D. (it is perhaps worth noting that the "rings" figured on Pl. xii, Fig. 144 not Fig. 140 as stated—are the earrings of the child). Thus all seems well for my classification as far as grave 40 at Ermenne is concerned.

The deposits in the graves of Lower Nubia are far richer and more varied than those of the Roman period in Egypt; since many of the objects were imported from the north it is desirable to establish a chronological series if only to illustrate and confirm the classification of Roman antiquities in the east and in the west. The duration of the Meroitic graves at Faras appears to include about two centuries and a half of unbroken prosperity, during which the characteristics of successive periods must shade off amongst themselves almost imperceptibly. In putting forward a somewhat vague classification of these remains I felt that it would require very critical handling, but that in principle it must be right, being based on particularly abundant material.

The Christian cemeteries at Ermenne are carefully described in Professor Junker's memoir so as to distinguish the varieties of burial and tumulus. A number of graves in Cemetery III were covered by kiosques like those at Ibrim and Gebel Adda; five stelae in Greek and nine in Coptic were obtained, all very corruptly written, and without titles or interesting names. Several lamps were found in niches but none was inscribed.

The intended publication of a report on the valuable anthropological material obtained from the different cemeteries is, unfortunately, not yet possible owing to the death of the two experts, Toldt and Pösch, who had undertaken to prepare it, but use has been made of some notes by the former on the skulls from the New Kingdom cemetery.

Professor Junker is as industrious in exploring and exhibiting the literature of a subject as in recording his own discoveries, so that his conclusions are arrived at after a particularly full weighing of the available evidence. It is interesting that he assigns to the Nobadae the X-group or "Byzantine period" culture, and

to the Blemmyes certain barbaric tumuli in the desert behind Kalabshah; this is in agreement with Mr. Firth's attributions. Further he ascribes to the Blemmyes some tumuli at Ibrim and, near Shellâl, Reisner's two "E-group" cemeteries, Nos. 7 and 14.

F. LL. GRIFFITH.

Beschrijving van de Egyptische Verzameling in het Rijksmuseum van Oudheden te Leiden, deel XIII; de Monumenten van het Nieuwe Rijk en van den Saitischen Tijd, Lijkvazen en Lijkvazenkisten door Dr. W. D. VAN WIJNGAARDEN. The Hague, Martin Nijhoff. 1926.

The latest of the annual volumes wherein the great collection of Egyptian antiquities in Leyden is being systematically published is devoted to the "Canopic jars," nearly a hundred and twenty in number, including two chests and many isolated jar-covers. The Museum contains an interesting group of three nested coffins with cartonnage-mummy, a chest and four Canopic jars, all belonging to a Theban priest named Pnehaz and dating from about the Twenty-sixth Dynasty. They were published by Leemans in the old series of Leyden *Monumenten*, where they filled a special livraison (III livr. 7) of ten plates; the set of vases is peculiar, having the head in one piece with the body and no cavity. There are besides five complete sets of inscribed vases in the collection. Amongst the persons named on the inscribed specimens are (No. 5) the princess Hat-nefer, not otherwise known, Gauthier, *Livre des rois*, III, 228; (No. 37) the princess Tshenêsi, daughter of Tadeêsi, perhaps a daughter of Anasis II, of whom three jars are in the Vatican, Nos. 102, 104, 105 of Marruchi's *Catalogo*; (Nos. 24-26) a remarkable series of three in limestone with the name Takellothis in a cartouche but without royal title; (Nos. 85-87) the vizier Ptah-mosi (temp. Tuthmosis III or Amenophis III, Weil, pp. 78, 82). The three uninscribed specimens in finely marbled alabaster figured on Pl. ix, two of them with knobbed covers, must be early¹.

The photographs are good, and are helped out by hand-copies of the inscriptions which, however, are not quite accurately made. Many of the painted inscriptions have disappeared, but in these cases copies made nearly a century ago by Leemans are generally utilized; one would have liked to have his copies also of 27 and 28 which are mentioned but not reproduced. It strikes one as a serious defect in this fine publication that there are no references to the very useful drawn plates in the old Leemans-Pleyte series, no cross references to objects from the same find, nor any identifications or comments on names, titles, etc. These matters, dealt with concisely, would add but little to the printing but would be of great value and interest to the student, and only the last of them would entail serious research for the editor.

F. LL. GRIFFITH.

Die Ächtung feindlicher Fürsten, Völker und Dinge auf altägyptischen Tongefässscherben des Mittleren Reiches, nach den originalen im Berliner Museum herausgegeben und erklärt von KURT SETHE. Aus den Abhandl. d. Preuss. Akad. d. Wiss., Jahrgang 1926, phil.-hist. Kl., Nr. 5, mit 33 Tafeln.

Professor Sethe here records in full a most interesting discovery, that of a simple contrivance employed by the Ancient Egyptians for the confounding of all the king's enemies. To this end names or descriptions of the objectionable people and things, individually or collectively, were written upon platters and bowls of pottery and the vessels afterwards broken up to annihilate or at least upset the rascals. A number of inscribed fragments of pottery obtained by the Berlin Museum prove to be the remains from such a performance.

The formula employed, restored from all the fragments, runs thus:

I. "The prince of Cush A, born of B, born to C, and all his familiars that are with him (and five more Ethiopian princes similarly)."

"All Nahsu (*i.e.* dark skinned peoples) of Cush and of Muger (and of twenty-one other places)."

"Their mighty men, swift-runners, allies and associates, who shall rebel, intrigue, fight or talk of fighting or intriguing in any part of this land (*i.e.* Egypt)."

II. "The prince of Ay^cank, D, and all his familiars that are with him (and another prince of the same locality, and princes of fourteen other localities in Asia in groups of from one to four for each locality)."

"All 'Amu (*i.e.* Asiatics) of Byblos (and of nineteen other places in Asia) their mighty men (etc.) who shall rebel (etc. as in I)."

¹ A plain terra-cotta jar with similarly knobbed cover was found in Tomb 8 at Serra in Nubia (*Liverpool Annals*, VIII, 98) and is probably as late as the Seventeenth Dynasty.

III. "Aborigines (?) in Teḥenu, all Temḥu (*i.e.* later comers into Libya) and their princes, their mighty men (etc.) who shall rebel (etc. as in I)."

The Libyans are thus disposed of summarily without naming individuals or sub-tribes.

IV. "All (Egyptian) people (*ṛmt*, *pḥt*, *ṛḥyt*), all males, eunuchs (?), women, nobles, who shall rebel (etc.)."

"May Ameni, tutor of Situbasti and controller of Sithathor-Nefru, die! (and Senwesert and six other Egyptians)."

V. "Every evil word, evil speech, evil slander, evil thought, evil intrigue, evil fight, evil disturbance, evil plan or (other) evil thing, evil dream or evil sleep."

The king is not named, but the writing belongs obviously to the period of the Twelfth Dynasty. Sethe argues that the historical moment may be when the founder of the Twelfth Dynasty at Thebes was becoming dangerous to the last ruler of the Eleventh Dynasty at Hermonthis. It is possible too that such a curse on the king's enemies was performed ceremonially by rule on certain occasions, for the formula contains expressions that were probably traditional long before the names Ameni and Senwesert had been thought of.

In the mass of fragments Sethe recognizes remnants of about eighty separate inscribed vessels falling into three types. Of one vessel, a platter, about two-thirds has been recovered, but others may be represented by single small pieces. On some platters the whole of the text was written either in full or in an abbreviated form, in other cases the five sections were distributed over a set of four bowls. The writing varies greatly from a good clear literary hieratic to a rapid business hand in which the distinctions between many signs were entirely lost or greatly obscured. Evidently a large number of people went through the performance.

Sethe has worked out the material most elaborately and yet with singular compactness. He gives full tables of the forms of the hieratic signs and combinations of signs, hand-copies of the text showing variants, and three plates of photographic facsimiles. The result of all his ingenuity and learning is to restore to us practically the whole of the comminuted text with the exception of some names of localities and foreign princes and their filiations.

Our knowledge of the peoples in contact with the Egyptians during the Middle Kingdom is very small, and this text furnishes an extensive contribution to it. It reveals Asiatic neighbours under the rule not of monarchs but of groups of princes or sheikhs; Sethe aptly compares Oreb and Zeeb, Zebah and Zalmunna, the dual kings of Midian in Judges vii-viii. Unfortunately few of the districts or tribes or cities, whether in Ethiopia or in Asia, can be recognized as being mentioned elsewhere.

We learn incidentally from the memoir that the great find of Middle Kingdom papyri made in 1896 by Mr. Quibell in a tomb at the Ramesseum, including a leading text of the Story of Sinuhe, is to be dated early in the Twelfth Dynasty, Sethe having found that one of them belongs to the reign of Sesostri I; this confirms the original dating of the grave in Quibell's work.

F. LL. GRIFFITH.

Toschke, Bericht über die Grabungen d. Akad. d. Wiss. in Wien auf dem Friedhof von Toschke (Nubien) im Winter 1911-12, von HERMANN JUNKER, mit Beiträgen von H. O. Antonius und G. Gruber Menninger (Akad. d. Wiss. in Wien, phil.-hist. Kl., Denkschriften, 68. Band, 1. Abh.), 1926. With plan and 38 plates.

The C-group may be set by the side of the Meroitic as one of the most interesting and characteristic of the archaeological periods in Lower Nubia. It was first isolated and named in 1907 by Reisner, who correctly assigned it to the age of the Middle Kingdom in Egypt. But all that Reisner found of it had been very badly plundered and it was not until Dakkeh was reached by Firth in the southward progress of the Survey of Nubia that well-preserved cemeteries of the C-group were met with. Toshke, twenty miles north of Abu Simbel and in 1889 the scene of Lord Grenfell's crushing victory over a Dervish force despatched from Omdurman to conquer Egypt, has furnished Professor Junker with a large and important cemetery whence he adds substantially to our information on the subject. The C-group cemeteries are marked by low flat-topped cylindrical tumuli of stone covering most of the graves, the pottery offerings being generally placed not inside the graves with the crouched body, but against the east or north side of the tumulus (Junker finds that the position varied to agree with the direction of the head of the corpse). They have now been traced northward by Junker to Kubanieh, a few miles below the First Cataract, and southward by the Oxford Expedition to Faras, only twenty-five miles from the Second Cataract.

There are many points on which light is required. While cemeteries are frequent and extensive on either side of the Nile between the two cataracts and are well furnished with antiquities, as yet no habitations of

the period have been identified unless the "Castle" at Areika (Er Rîka) belongs to it. The people were doubtless of nomad origin, but one would expect to find them settled in villages, especially in their later stages when they used crude brick walls and vaulting in the construction of their graves. Egyptian objects found in C-group graves are attributed to the Intermediate Period between the Old Kingdom and the Middle Kingdom and thence onward to the New Kingdom. Some years ago I tried to explain the C-group historically as having risen with the fall of the Old Kingdom in Egypt and come to an end with the conquest of Nubia by Sesostri III. But the evidence of its continuance in prosperity to the Eighteenth Dynasty is now too strong to set aside; in fact it seems that the expeditions of the Twelfth Dynasty made no serious impression upon it and brought no ill results to the C-group people. May not the *Nahsi* mother of Amenemmes I have been of them? Anyhow they must have kept on good terms with the Egyptians while preserving their own peculiar culture, and it was the people of Cush beyond the Second Cataract whom the Egyptians fought against, temporarily overcame, and yet feared as is shown by the mighty fortresses which they erected throughout the region of the Cataract.

The chronological and other relationships of the C-group to the Cushite civilisation of Kerma need to be defined. Remains of the latter have as yet been found in abundance only at its centre in Kerma itself; in Lower Nubia and in Upper Egypt they appear only in isolated graves of about the Hyksos period and the Seventeenth Dynasty, probably belonging to detachments of mercenary soldiers in the employment of the government of Egypt. Junker sees traces of the influence of Kerma in some of the products of the C-group.

Amongst the best points made by Junker and his helpers in *Teschke* must be counted a good series of C-group skulls thoroughly worked out, showing little that is negroid; the determination of the bucrania as belonging to a small race of *Bos primigenius* and of the "goats" as being in reality of the ancient Egyptian race of sheep; several examples of pierced pottery stands, etc. (while of the known types of pottery exceptionally fine specimens were secured); and the recognition that the wheel-made and Egyptianizing pottery was of local manufacture. Every aspect of the finds is considered in this excellent piece of work, which is also very fully illustrated by drawings and photographs.

Distinct from the C-group burials a separate patch of three graves was found, lined with stones but shallow, the body contracted; one of these, intact, contained beads and a bronze bowl, attributed to the New Kingdom, having a swing handle attached by two loops with palmette bases.

F. LL. GRIFFITH.

La fiscalité romaine en Égypte aux trois premiers siècles de l'Empire. Par VICTOR MARTIN. Genève: Librairie Georg et Cie. 1926. Pp. 31.

This pamphlet reproduces a lecture delivered by Professor Martin at Geneva, which deserved to be recorded in a permanent form: it is the best summary that has yet appeared of the policy pursued by the Roman Emperors in Egypt from the date of their conquest of the country, and exposes the pitiless elaboration of the machine for extracting every possible penny or grain of corn from the Egyptians, which, as Professor Martin points out, was only modified by the better emperors so far as not to kill the goose which laid the golden eggs. The indictment is well supported by quotations from papyri, and the argument clearly and convincingly put: it goes far towards shattering the picture which has been drawn by some historians of a prosperous and contented Egypt under the two first centuries of Roman rule.

J. G. MILNE.

Kings of the Hittites. By D. G. HOGARTH. London: Oxford University Press (for the British Academy). 1926.

Kings of the Hittites represents the Schweich Lectures delivered by Dr. Hogarth in 1924. We have in them the matured conclusions of the excavator of Carchemish, and as might be expected they are full of suggestion and new light. The main conclusion is especially gratifying to myself as it agrees with the conclusion I had reached on philological grounds. On the archaeological side Dr. Hogarth makes it clear that the authors of most of the Hittite hieroglyphic texts and the art connected with them were not the older Hittites of Boghaz Keui but the Muskâ or Moschians of the Assyrian inscriptions, who formed a chief element in the peoples of "the North" that destroyed the First Hittite Empire and invaded Egypt in the time of Ramesses III. They made Tyana the centre of their power and established what I have called the Second Hittite Empire. It is termed the Cilician Empire by Solinus, whose description of it has now been traced to the reliable authority of Timagenes.

The name Hittite (*Khattu*) in Assyro-Babylonian corresponds with "Asiatic" in English or "Pelagian" in Greek. It denoted the populations of eastern Asia Minor, whatever might be their ethnic or linguistic affinities, as well as their subject populations in Syria and Palestine. Esar-haddon for instance describes the kings of Sidon and its neighbourhood as "kings of the Khatti" and Sargon speaks of Syria as "the country of the Hittites of the land of the Amorites." Elsewhere he sums up Western Asia as consisting of "Egypt and the Moschians, the Amorites and the Hittites." So, too, in Genesis Heth is the second son of Canaan, while Ezekiel traces the foundation of Jerusalem to Hittites and Amorites, the Mitannians being meant under the latter name.

The larger part of Dr. Hogarth's book is devoted to a careful examination and comparison of "Hittite" art in its various forms, whether found in Asia Minor or in Syria, and is abundantly illustrated by photographs. He is inclined to refer the origin of it to Northern Mesopotamia if not further north "beyond the Euphrates." At all events he draws a clear line of distinction between what he calls the "Hattic" of Boghaz Keui and the later Hittite art of Syria as found at Tell Khalaf, Zenjerli and Carchemish. But here again a distinction must be made; at Zenjerli and Tell Khalaf we find a first artistic stage of rude and primitive character which forms a contrast to the later art of Zenjerli and Carchemish. It is with the second class of Carchemish sculptures that "the parallelism with Zenjerli begins." "The original culture had differed on the two sites" however, and if the pioneers in "Zenjerli were Arameans we must infer that the Carchemish pioneers were of another stock. And the inscriptions associated with the sculptures show that they were Hittites, or more exactly Moschians, called Kaskians and Urumayans by Tiglath-pileser I.

But it must be remembered that besides the Moscho-Hittite states of Syria there was also at least one state that was Hittite in the narrowest sense of the term. This was Khatti-na, "the Hittite-land," in the Plain of Antioch, whose kings bore the names of the old Hittite kings of Boghaz-Keui, Lubarna, Sapalulmi, and the like, while we also meet with the name of Mutallu among the neighbouring kings of Gurgum and Komagene. Here, therefore, the old stock must have survived.

Upon one point Dr. Hogarth's statements need modification. "The earliest script characters," he says, "appearing on monuments of a later class (than those of Euyuk) are morphologically so primitive that, if the origin of the Hattic script be presumed of earlier invention than the sculpture of the Second Cappadocian Style, it must have been remarkably slow in development." But the much earlier characters incised on my tablet from Boghaz Keui, which contained the first part of the inventory of the objects in the royal treasury, are very beautifully formed while those found at Yasili Kaya are also fairly good, whereas on the other hand those written by the "lady-dentist" Wattitis on a tablet now at Berlin are equal to the very worst type of linear script that has been discovered anywhere. Where cursive forms of script are concerned it is impossible to base chronological systems on inscriptions found in different localities: a script borrowed by the possessors of a lower civilisation from a people of higher culture is likely to be degenerate. I believe that the hieroglyphic inscriptions of the Thinite Dynasties in Upper Egypt as compared with those of the Third and Fourth Dynasties in Northern Egypt are a case in point.

A. H. SAYCE.

Die Waffen der Völker des alten Orients. Von HANS BONNET. Leipzig: J. C. Hinrichs'sche Buchhandlung. 223 pp. 107 Abbildungen.

This book deals with a fascinating subject, and was planned originally with an interesting purpose. The author intended to illustrate the mutual exchange of the material products of civilisation in ancient times in one limited field, and chose weapons as his subject because the technique of making weapons was best calculated to serve his purpose. Unfortunately, as the author found, the evidence in our possession is not sufficient; there is no unbroken series of types from the different countries, and conclusions based on insufficient material are better avoided. The book is rather a collection of the evidence, with hints on the history of the development based on the comparative method. It is well written, is laudably free from the acerbities of criticism now too common, and provides a good conspectus of the subject. The present writer has learnt a great deal from it, and is under a considerable debt to the author for many illuminating remarks.

* The weakness of the book—and it is a weakness soon felt—is that the material available to the author seems to have been purely book-material: he has not personally examined some of the largest and most important museum collections. Thereby some errors have crept into his work. Thus in dealing with the mace he says "In später Zeit tritt zuweilen auch Metall an die Stelle des Steines" (p. 5). The British Museum has copper (?) mace-heads inscribed with the name of Hammurabi, *Guide*, 87. Again, in the

section on the shield, some stress is laid on the importance of the number of arm-hoops, whether one or two, and it is stated (p. 193) "sind doch Schilde mit zwei Bügeln den Völkern des alten Orients überhaupt unbekannt." But the largest and best-preserved of the ornamental Urartæan shields from Wān is still studded, to prove that it once had two arm-hoops, whether they were made of leather or metal. Or we may turn to a point of more interest. In a long and interesting discussion of ε-shaped axes, the author points out that this form occurs in Egypt in predynastic times, and was popular throughout the Middle Kingdom period (p. 27), that in New Kingdom times it was chiefly employed by "Semites" from Palestine and Syria, but that the axe now has a cast socket (p. 31). The conclusion is thus stated (pp. 31-2):

Entwicklungsgeschichtlich sind diese Äxte von grossem Interesse, denn deutlich fliessen in ihnen Anregungen des ägyptischen wie des babylonisch-hethitischen Kulturkreises zusammen. Diesem ist die Schäftung mittels einer Tülle entlehnt, jenem ist die Form der Klinge entnommen. Denn dass diese nicht etwa eigenes Gut ist, sondern auf das Vorbild der ägyptischen halbkreisförmigen Klinge zurückgeht, steht sicher. Sind doch unter den nicht ganz wenigen Axt-klingen, die sich in palästinensischen Ruinenstätten gefunden haben, rundliche so selten anzutreffen, dass sie sich deutlich als Import kennzeichnen ...

But these ε-shaped axes are represented in collections from Mesopotamia of uncertain date. One excavated at Ur in 1922-3 seemed to belong to a period not later than 2000 B.C.; its socket was not cast, but consisted simply of the three tabs prolonged and bent cylinder-wise. Even so, Herr Bonnet's argument might hold, but he should have recognized the existence of the ε-shaped axe in Mesopotamia: if it is purely Egyptian, the fact is important. It is possible however to doubt this, and also to doubt the "typology" argument connected with it. That argument runs, that the ε-shaped axe was derived from the simple crescent shape, for the sake of simpler hafting. Now Sargon of Akkad's soldiers carried the crescent-axe, not later than 2500 B.C. (see *Revue d'Assyriologie*, XXI, p. 73, fig. 8); but a relief recently discovered by Mr. Woolley at Ur, unquestionably contemporary with or earlier than the First Dynasty of Ur, about 3000 B.C., shows two ε-shaped axes in the weapon-carrier of a chariot. Besides these types of axes, the adze-like axe was in regular use from very early times. The proposed development of the types is against the evidence.

The question then is a complicated one. The same may be said of any one of Herr Bonnet's sections. We may instance that on the throw-stick. The question whether the ancient East used a throw-stick that returned, a boomerang, is dealt with on pp. 112-3, and one conclusion of the author,—“Eine andere Frage ist aber, ob man die Eigenschaft des Bogenfluges schätzte und bewusst herbeizuführen suchte. Sie ist in we-entlich sicherlich zu verneinen”—can hardly stand if M. Thureau-Dangin's translation of *tīlpanu sahirtu* as "bâton de jet qui fait retour" (*Revue d'Assyriologie*, XXI, 142) is correct. But there is a further question: on cylinder seals and elsewhere men hold objects shaped in exactly the same way as the object called a throw-stick, but in attitudes which suggest that the object had a knife-edge. It is fairly certain therefore that not everything is a throw-stick which has that shape, and the enigmatical copper pieces found by Mr. Mackay, *Report on the Excavation of the "A" Cemetery at Kish*, Part I, Pl. xvii and p. 39, obscure our understanding more.

It would be possible to deal with every one of Herr Bonnet's sections in this way. His book is a valuable introduction to a most difficult subject. Perhaps he himself will be able to carry his study further. In that case we would ask him to consider the effect of craftsmen's guilds on these industries. In the modern East the smiths have their own quarters, their own manners, their own traditions: in the desert they are treated as a people apart (the Šlebi or Šulubā), having curious privileges such as the right of trespassing on tribal areas, and some still more curious disabilities, e.g. they do not own camels. In the ancient East much the same conditions prevailed: and far more is to be explained from the wandering of individual members of guilds than we are perhaps ready to allow.

SIDNEY SMITH.

Les statues vivantes: Introduction à l'étude des statues égyptiennes. Par M. WEYNANTS-RONDAY, préface de Jean Capart. Bruxelles, Édition de la Fondation Égyptologique Reine Élisabeth, 1926.

The beliefs concerning the "animation" of statues have always interested Professor Capart, and one of his pupils, Mme Weynants-Rondan, inspired by his lectures, has made the theme the subject of a dissertation which has deservedly won for her the degree of Doctor of the History of Art and Archaeology. This dissertation is now before us in book form, one of the well-produced publications of the Queen Elisabeth Egyptological Foundation.

The author has adopted the comparative method in developing her thesis, that is to say she has cited numerous instances of parallel ideas and beliefs amongst various ancient or primitive peoples to illustrate

and to suggest explanations of the Egyptian ideas relating to statues. Unfortunately the comparative method has hitherto been but little used in Egyptological studies. In the domain of medicine and magic, the present reviewer has often found the medical literature of other ancient nations extremely valuable and suggestive in attempting to understand and interpret the often obscurely phrased ideas of the Egyptians; and what applies to medicine applies equally to other departments of human thought and activity. The author has quarried extensively into the rich veins of Frazer's *Golden Bough* and de Groot's *Religious System of China* and has thereby produced a most interesting and readable volume. In the widespread idea of a separately-existing spirit or soul residing apart from the corporeal body in a statue, tree, or other vehicle, numerous parallel ideas are cited, but the greatest caution is necessary in comparing these as equal with equal; for so abstract an idea as soul, self, personality, spirit, double, or whatever else it may be called, is very variously understood and interpreted by primitive peoples.

It is hardly sufficient to invoke the doctrine of "psychic unity" to explain the striking similarities and analogies in the customs and beliefs of widely separated peoples. This doctrine, in the reviewer's opinion, collapses on its own premisses, for we find not unity, but infinite diversity, and in cases where the closest analogies between the thought or customs of various peoples are to be found, there is usually the greatest possible difference between the mental, physical and cultural circumstances of the one people and the other.

Be this as it may, the author has made a good case for the vindication of the idea of the "double" as the interpretation of the Egyptian *ka* propounded by Maspero, and her book is a valuable collection of data and a most useful contribution to the literature of the subject.

WARREN R. DAWSON.

Kingship. By A. M. HOCART. Oxford University Press, 1927. pp. x+250.

This sincere, thoughtful and interestingly written book attempts to establish that human society everywhere passed through a stage in which kings were worshipped. The belief in the divinity of the king is the earliest known religion and the king is the equivalent to the sun. As far as I am concerned, I do not think the thesis probable in itself, but my main difficulty in criticizing the book is an inability to see that the conclusions which the author draws from his facts necessarily follow. Interpretation or inference, upon which we are thrown back in difficulties, so often seem to the dispassionate observer, who has no proprietary interest in the conclusion, to distort the data. My reflection about the references to things Greek and Roman was how easy it is for secondary sources to mislead a highly intelligent reader. It is certain that the author does not know this field in detail: about Fiji, on the other hand, he is undoubtedly an authority and has some very interesting things to record. But, of course, I belong unashamedly to the race of meticulous and timorous pedants against whose disbelief the author avows himself to be prepared. "Life is short and the art long; the opportunity fleeting; experiment is dangerous and judgment difficult." But if we prefer to plod on our patient way attempting to piece together fragmentary facts, we are not necessarily blind to the courage and occasional utility of these bold flights of imaginative reconstruction. Some of them may turn out to be right some day, though I doubt very much whether this will be among them.

W. R. HALLIDAY.

Egyptian Grammar, being an Introduction to the study of Hieroglyphs. By ALAN H. GARDINER. Oxford, at the Clarendon Press, 1927. 4to. pp. xxviii+395.

An English journal should give a particularly hearty welcome to this magnificent book. Although for seventy years past English students have been provided with elementary grammars successively by Samuel Birch, Le Page Renouf, Sir Ernest Budge and Professor Margaret Murray, the first grammatical treatise produced by an English Egyptologist was Battiscombe Gunn's *Studies in Egyptian Syntax*, which appeared in 1924. Gardiner tells us in his preface that he, too, planned originally for an elementary work, but that after the first six lessons had been devised with Gunn's help his effort took on another character. The resulting book, in fact, may be divided into two parts. The Introduction and the first six lessons orientate the beginner in the history of the language, the nature of the writing, the history of decipherment and the range of Egyptian literature, and start him in acquiring the values and uses of the hieroglyphic signs and in translating and constructing Egyptian sentences; the rest is an exhaustive account of the grammar and syntax of Egyptian in the period of its highest development while the hieroglyphic writing was still uncorrupted. This phase is the so-called Middle Egyptian, the language of all writings, whether in hieroglyphic or in hieratic, between the end of the Old Kingdom and the reign of Akhenaten, so that it includes





the bulk of the known literary and historical texts along with masses of religious and miscellaneous material.






The *Grammar* lies in the direct line of descent from Erman's *Grammatik* and Sethe's *Verbum*, and is fully worthy of its high lineage. Dr. Gardiner, to whom we already owed grammatical discoveries of great value as well as masterly editions of difficult texts, has re-weighed all the evidences and re-considered the classification and nomenclature with a perfectly independent mind, and so in many cases has reached new conclusions and new terminology. From his exhaustive knowledge of the texts he has heaped up telling examples, some of which he prints in full, and gives references for the rest. The work, in fact, is a mine of grammatical information for the period named that will long retain its value. Egyptian copyists are notoriously bad and there has been a tendency among some excellent scholars to accept the rules in the third edition of Erman's admirable *Grammatik* as standards by which to correct the supposed errors of obscure but good texts, making too small an allowance for the incompleteness of our knowledge. Gardiner and his ingenious friend and pupil, Gunn, taking such texts as they stand and reading widely and noting diligently, have modified and added to the rules, penetrating deeper into the spirit of the language and the meaning of the phrases with the striking results that are seen, for instance, in Gunn's treatment of the negative and Gardiner's of the *sdm-f* forms of the verb, perfective and imperfective. Syntax is elaborately treated in Gardiner's *Grammar* and remarkable results are attained. On page after page we find clever reductions to rule of usages in some cases perhaps vaguely felt to exist but never before set down, while in others they come with a shock of surprise or even serious doubt until tested by the quotations and references and found to be correct. The nomenclature is put on a wider basis of modern grammatical theory than before and is altered and elaborated accordingly. For instance, the expression "pseudo-participle" applied to a very interesting form of the verb first brilliantly defined by Erman many years ago, seemed appropriate enough at the time, but has long been felt to be inadequate and is now replaced by that of "old perfective," referring to its origin and early use. So also the various "non-verbal sentences" of Gardiner, "sentences with nominal, pronominal, adjectival and adverbial predicate" respectively are a distinct improvement on the names used by Sethe in his recent treatment of the "nominal sentence." Owing to the absence of vowel-signs, the *Formenlehre* remains very obscure, and in this department Gardiner has not succeeded in materially improving on the results obtained by Erman, Steindorff and Sethe.



Notwithstanding the wealth of detail, the requirements of the learner have been kept in view throughout, so much so in fact as to sacrifice in part the logical arrangement of the material to a well-thought-out course of training in theory, translation and composition. But cross references, and an elaborate table of contents help to correct inconveniences felt at first in seeking information on particular points. Under the circumstances a fuller index would have been a boon, and the student will find it indispensable to make a skeleton grammar for himself with references to the sections of Gardiner. To give the work its full value for reference a key of this kind made by some qualified person should be printed; this could be done at very small cost. After some experience in using the book one recognizes that to read successively its "Lessons" and Excursuses, and translate its hieroglyphic exercises into English and its English exercises into Egyptian is a training the benefits of which are obvious as far as the pupil is concerned but are by no means confined to him; the teacher also must admit that his own knowledge is enormously increased and solidified and that endless difficulties are illuminated. The work is full of originality, critical thought and sound and ripe scholarship. How excellent are the remarks in the Introduction on the unphilosophical character of the language, and the comparison of its development in the New Kingdom with that of French from Latin! We realize that with Gardiner the exposition of Egyptian Grammar is no longer confined to cataloguing its external features: we have been led on to contemplate the very constitution of the language. Let no would-be reader be deterred by the bulk of the book. Let him realize that it contains not only the rules of Middle Egyptian grammar with ample illustrations, but also a great variety of exercises in reading and translation, rich vocabularies Egyptian-English and English-Egyptian, and a vast *catalogue raisonné* of over 700 signs with their nature and uses admirably explained, itself a concise study in the archaeology and natural history of ancient Egypt. The *Grammar*, in fact, is a solid work of reference as well as a learner's manual. The systematic catalogue of hieroglyphs is one of the most remarkable features of the book, supplying a long-felt want. And this brings us to the subject of the beautiful hieroglyphic type which Gardiner has provided for his great work from the drawings of Mr. and Mrs. de Garis Davies; happily it is now becoming familiar to the readers of the *Journal* who can admire the neatness of its adaptation to ordinary print as well as the beauty and truth of its delineations.





It might seem invidious to point out trifling defects in a really great work, especially for one to whom the author has paid the delicate compliment of its dedication and who has the most pleasant recollections of guiding his schoolboy steps in Egyptology. But Gardiner has asked me personally to criticize. I will therefore set down such few points of detail as have seemed to me to be capable of improvement. To anyone who has seen the book these remarks will serve to show how difficult it is to pick holes in Gardiner's work.


P. 44, sentence (9). The expression "sails down" is inappropriate to a Nile voyage; "fares down" is used elsewhere by Gardiner.

P. 65, § 84, p. 126, § 163, 6.  "teach" seems to be constructed with  as having the fundamental idea of guiding or leading; thus  here should mean "to," not "in regard to":  "star" must be from the same root.

P. 66, § 85. The inverted filiation    so common in the Twelfth Dynasty, could hardly have been read *Hnmhpt s3 Nhyr*.  seems an "honorific transposition," doing honour to the father's name, like  "son of Amūn" honouring a divine name; thus the phrase must rather be read *s3 Nhyr Hnmhpt*, "The son of Nehery, Khneimhotpe."


P. 119, l. 13.  alone for *sw* is hardly to be found, and in the passage quoted (Pl. 8 of *Sint*, l. 313) it was a mistake of my copy corrected to  in the *Errata*, *ibid.*, Pl. 21.

P. 151, § 201.  is transcribed *brwy* with masc. pl. agreement  but on p. 246, l. 13, *brty* without such clear evidence.  is not specially mentioned in the sign-list, p. 443, or in the vocabulary and one would be glad of a statement from Gardiner on the subject. The Berlin *Wörterbuch*, l. 108, admits a masculine  but leaves the question of the reading open.

P. 201.  *sw* "length" is required in the Vocabulary here and in the English-Egyptian Vocabulary, p. 579.

P. 202. I should be inclined to translate the fourth line of the account "brought to him (or 'added to it,' *i.e.*, the account) by royal decree, which (amounts) are brought (regularly) from the temple of Amūn." The present translation seems to represent the royal decree as brought from the temple, and that is difficult to understand.

P. 260, l. 10, p. 261, l. 2. "vetitive" not "vetative."


P. 463, G. 47. "nestling" seems a better description for  than "open-mouthed chick."

P. 555, l. 10. *Read* see on this p. 487, Q. 1.

" l. 11. " " " " p. 487, Q. 1.

" l. 15. " " " " p. 477, N. 25.

Dr Gardiner, who is nothing if not progressive, has added to the preface three pages of valuable "additions and corrections" observed by him in the course of printing, some of which had already been made use of in the later pages of the book.

The book has been printed with extraordinary care by the Clarendon Press; its standard of correctness is almost that obtained in the printing of the Bible. Amongst the thousands of references there must surely be a few wrong figures, but I do not propose to undertake a special research in order to discover them! The only misprint that I have detected is a  dropped out at the end of the second hieroglyphic line on p. 147. Egyptologists all over the world will be grateful to Dr. Gardiner for his labours, the brilliant results of which he has clothed in a lavishly beautiful dress and presented to them with a fine disregard of its very heavy cost.

F. LL. GRIFFITH.

Grundzüge der ägyptischen Vorgeschichte. Von ALEXANDER SCHARFF. (*Morgenland*, Heft 12. J. C. Hinrichs, Leipzig, 1927.)

The volume with which the "Beihefte zum Alten Orient" become known as "Morgenland" is appropriately chosen. It begins at the beginning, and treats that beginning in a remarkably fresh way. This is not to say that Dr. Scharff's 60 pages of text are packed from one end to the other with new facts. On his own showing the book is written mainly for the general reader, and he claims to interest the Egyptologist and prehistorian not so much by new discoveries as by a synthesis of old ones; more especially by linking up the palaeolithic and later prehistoric periods in Egypt.

Yet although the bulk of his facts are old—he is perhaps unaware that the Capsian culture with its

important connexions for Egypt, North Africa and Southern Spain have been sketched by Professor Myres in the *Cambridge Ancient History*—he has succeeded in adding a number of convincing details and riders to the general outline; as for instance in this very case of the Capsian culture, when he compares two pottery shapes of the First Egyptian prehistoric period with two West-European forms, the *Pokal* and “*Kielcase*” respectively, which show the spread of the original Hamitic culture up through Spain into Southern France.

Similarly it is some years since Dr. Hall advanced in *The Ancient History of the Near East* a theory of two cultures existing in Upper and Lower Egypt respectively, with the eventual spreading of the latter throughout the former. Scharff gives us much greater precision, assigning on the basis of the sequence dating—but in more detail than Petrie himself—the exact material characteristics, with their inferences, to each civilisation. But his most important contribution in this respect is his suggestion that the two cultures were contemporaneous (though separate) until about sequence date 38, when the objects found in the northern cemeteries (of which Abuṣīr el-Melek—later known as the Abydos of Lower Egypt—is the most prolific example) are found mixed with those of the First Culture in the south. This mixing in the south represents the gradual conquest, or assimilation, of it by the north; and the main argument for the contemporaneity of the two lies in the observed fact that while this northern culture spreads to the south, objects from there are never found in the north, although the type of culture in the south was able to last on in Nubia—as witness, *e.g.*, the numbers of pots known as “C-group” pottery—after it had disappeared from Upper Egypt. Moreover, when the exceptional object appears which combines elements believed to be exclusive to the respective cultures—an example of this in the British Museum is shortly to be published by Dr. Scharff in the *Journal*—it provides further proof of this contemporaneity, since it suggests that, as is to be expected, sporadic contact took place between the two cultures before they were actually united. It may be objected that the game is too easy when two sets of contradictory facts are both used as evidence for a theory, but at present there is no likelihood of these exceptional cases being sufficiently frequent to become themselves a rule.

Another attractive addition to our study of early Egyptian history is Scharff’s plea for a shortening of the traditional length assigned to the Fourth and Fifth Dynasties. His tabular arguments for this on pp. 52, 53 are convincing. And we must certainly be grateful for his insistence on 2781–2776 B.C. rather than 4241–4236 B.C. for the institution of the calendar, and the ingenious attribution of its invention to Imhotep under King Zoser. The latter is only possible however if we can bring the First Dynasty down to about 3000, as Scharff does. His grounds for this are that the predynastic and archaic objects which show connexion with Mesopotamia, *i.e.* mace heads, lion-motives and the like, indicate that the end of the predynastic period roughly coincides with the oldest known civilisation in Mesopotamia, and this, following Eduard Meyer, he places round about 3000 B.C. This brings us to a serious objection to his book: the total disregard of recent excavations in Mesopotamia other than those of Andrae. Neither the work of the British Museum and the University of Pennsylvania at Ur and el ‘Ubaid, nor that of Professor Langdon at Kish, has been taken into account. But reports of the work on both sites are available, and a study of these would have shown that the lowest date for the First Dynasty of Ur cannot be later than about 2900 B.C., and that a great deal of the material under discussion must go back at least two or three centuries earlier than this. As it happens the latest finds from Ur seem to prove that forms (speaking now of classes of objects which were indigenous each in their respective countries) may last much longer in Mesopotamia than we are accustomed to expect from Egyptian archaeology, and that while styles can be seen to have changed with a generation in Egypt, they appear to have continued with little alteration for two or three centuries in Mesopotamia. It is therefore not impossible that the same type of object was being carried from Mesopotamia to Egypt over a considerable period of time. So that 3000 B.C. may still stand as the date of Menes. Similarly, however, in the opinion of the reviewer, the beginning of relations between Egypt and Mesopotamia should be put further back than Scharff is prepared to go. Further Ur finds prove also that Sumerian civilization was never more flourishing than at a date which at the latest cannot be put below 3000 B.C. and may well have been much earlier. In any case Scharff does not give sufficient weight to the little evidence he does quote for a connexion between the two countries.

Dr. Scharff has given us a very useful survey of the subject, marred though it be in respect of some of his main theses by his neglect of Mesopotamia. It is full of interesting points of detail for which the reader must go to the book itself, and, as I have tried to indicate, it is a real contribution to our knowledge on at least two of the most important problems in the subject.

S. R. K. GLANVILLE.

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